

UTAH Retirement Systems

*A Component Unit of the
State of Utah*

2022 Annual Comprehensive Financial Report

*For the Year
Ended December 31, 2022*



- Noncontributory Retirement System • Contributory Retirement System
- Public Safety Retirement System • Firefighters Retirement System
- Judges Retirement System • Utah Governors and Legislators Retirement Plan
- Tier 2 Public Employees Contributory Retirement System
- Tier 2 Public Safety and Firefighter Contributory Retirement System
- Roth and Traditional IRAs • 401(k) and 457(b) Plans



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Utah Retirement Systems

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

December 31, 2021

Christopher P. Morill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2022

Presented to

Utah Retirement Systems

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

Alan H. Winkle

Alan H. Winkle Program Administrator

Utah Retirement Systems

A Component Unit of the State of Utah

2022 Annual Comprehensive Financial Report

For the Year Ended December 31, 2022



Noncontributory Retirement System

Contributory Retirement System

Public Safety Retirement System

Firefighters Retirement System

Judges Retirement System

Utah Governors and Legislators Retirement Plan

Tier 2 Public Employees Contributory Retirement System

Tier 2 Public Safety and Firefighter Contributory Retirement System

401(k) and 457(b) Plans

Roth and Traditional IRAs

Prepared by: Finance Department • Utah Retirement Systems
560 East 200 South • Salt Lake City, Utah 84102-2044 • www.urs.org

Daniel D. Andersen, Executive Director

Robert D. Dolphin, Chief Financial Officer

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Utah Retirement Systems

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Aggregation of Funds With a Net Pension Asset

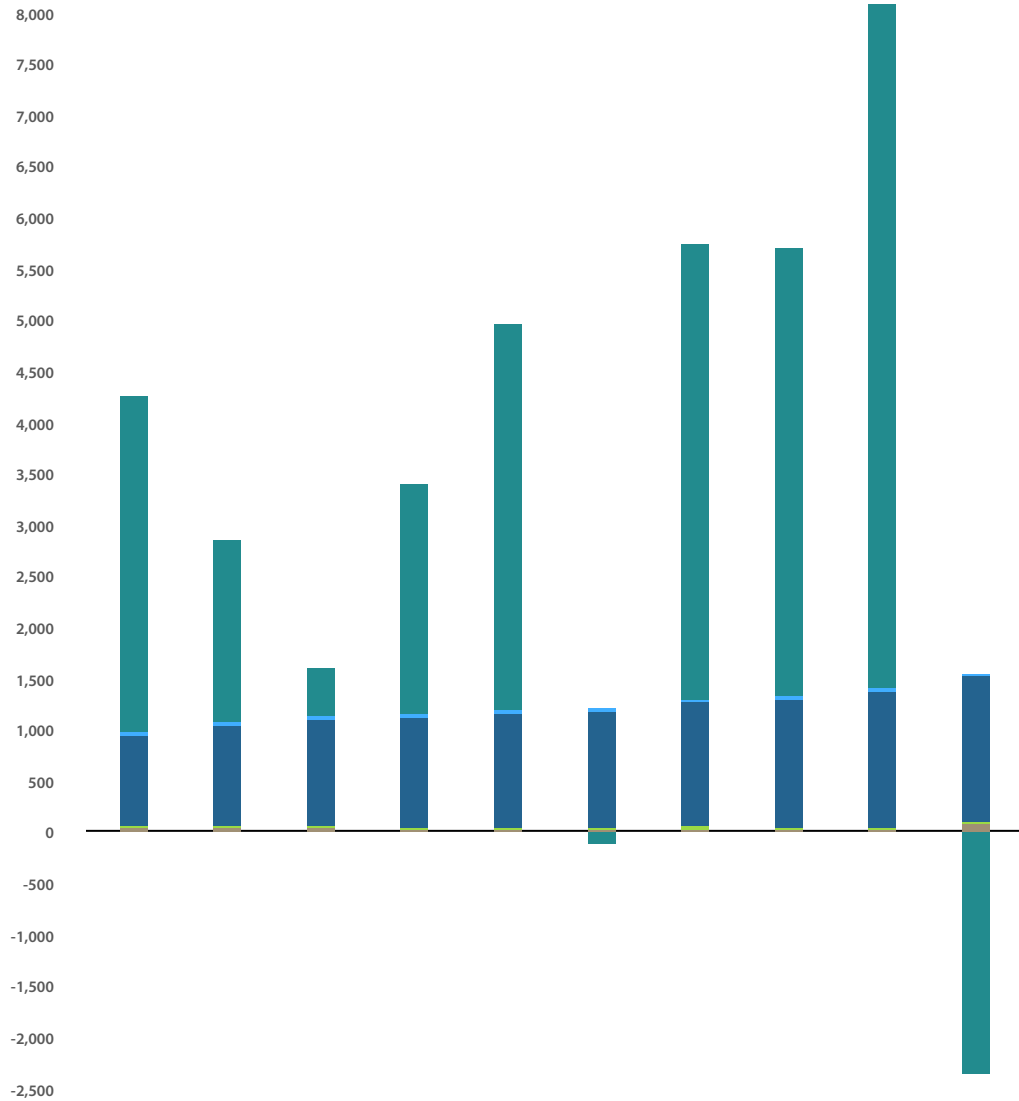
Aggregation of Funds With a Net Pension Liability

Systems and Plans Statistical Highlights

Utah Retirement Systems

Additions by Source

(in millions)



(in millions)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net investment income (loss)	\$ 3,261	1,786	462	2,249	3,774	(116)	4,447	4,381	6,667	(2,357)
Employee contributions	40	39	41	39	39	36	33	40	43	45
Employer contributions	889	974	1,036	1,073	1,113	1,139	1,198	1,248	1,318	1,420
Court fees and fire insurance tax	13	16	19	12	3	10	43	22	22	24
Transfers from systems	42	38	42	10	11	26	20	17	21	69
Totals	\$ 4,245	2,853	1,600	3,383	4,940	1,095	5,741	5,708	8,071	(799)

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Utah Retirement Systems

Letter of Transmittal

UTAH STATE RETIREMENT BOARD
UTAH RETIREMENT SYSTEMS
560 East 200 South
Salt Lake City, Utah 84102-2044
801-366-7700
800-365-8772
801-366-7734 FAX

DANIEL D. ANDERSEN
EXECUTIVE DIRECTOR

May 31, 2023

Utah State Retirement Board
560 East 200 South
Salt Lake City, UT 84102-2044

Dear URS Members and Board of Directors:

We are pleased to present the 2022 Annual Comprehensive Financial Report of the Utah Retirement Systems (Systems), including the 401(k), 457(b), and Roth and Traditional IRAs (Plans). Together, the Systems and Plans constitute a component unit of the State of Utah, administered by the Utah State Retirement Board (Board) for calendar year 2022.

The financial reporting entity of the Systems and Plans include the Public Employees Noncontributory and Contributory Retirement Systems, for both government and public education employees, the Public Safety, Firefighters, and Judges Retirement Systems, the Utah Governors and Legislators Retirement Plan, the Tier 2 Public Employees Contributory, and Tier 2 Public Safety and Firefighter Contributory Retirement Systems, and the 401(k), 457(b), and Roth and Traditional IRA Savings Plans.

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the management of the Systems and Plans. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the fiduciary funds.

For financial reporting purposes, the Systems and Plans adhere to accounting principles generally accepted in the United States of America. The Systems and Plans apply all applicable pronouncements of the Governmental Accounting Standards Board (GASB). Investments of the Systems and Plans are presented at fair value.

The Utah Retirement Systems and 401(k), 457(b), Roth and Traditional IRAs were established by legislation and authorized as indicated in the notes to the basic financial statements on page [56](#). The Summaries of Plan Provisions are presented on pages [220](#) through [229](#). The number of active and retired members and beneficiaries for each system is presented in the Systems' Highlights on pages [14](#) through [29](#). The purpose of the Systems and Plans is to provide benefits for all eligible State, local government, and most public education employees whose employers have elected to participate. Services provided by the staff are performed to meet that objective.

Management's Discussion and Analysis

The Management's Discussion and Analysis (MD&A) beginning on page [36](#) provides an overview and analysis of the Systems and Plans Basic Financial Statements. This letter of transmittal is intended to complement the MD&A and should be read in conjunction with it.

Letter of Transmittal *(Continued)*

Financial Information

Management is responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to maintain accountability for assets and to permit preparation of financial statements in accordance with generally accepted accounting principles. The concept of reasonable assurance recognizes the cost of a control should not exceed the benefits likely to be derived. This system includes written policies and procedures and an internal audit department that reports to the Board. Discussion and analysis of net position and related additions and deductions are presented in the MD&A beginning on page [36](#).

Actuarial

The actuarial assumptions and contribution rates were based on the recommendations of our actuary. See the Actuarial Section of this report and the notes to the basic financial statements for explanations of these rates. Rate changes resulted from actuarial assumption modifications, economic conditions, actuarial experience gains and losses, and benefit enhancements in the Systems.

The Utah Retirement Systems are maintained on an actuarially sound basis as certified in this report by our actuary, thus protecting participants' future benefits. We anticipate investment earnings on a long-term basis will continue to meet or exceed the actuarially assumed earning rate. We expect all systems to continue towards fully funded positions in accordance with actuarial assumptions.

An actuarial valuation of the Systems is performed annually. An assumption experience study is performed at least every third year. The actuarial firm Gabriel, Roeder, Smith & Company completed the actuarial reviews and valuations and served as technical advisor to the Systems. Actuarial certification and supporting statistics are included in the Actuarial and Statistical Sections of this report.

Investments

The economic condition of the Systems is based primarily upon investment earnings. For 2022, the Systems experienced a (5.0)% rate of return. The Systems' investments were evaluated at year end by Callan Associates Inc., Investment Measurement Service.

A comparative analysis of rates of return is presented on page [184](#) of this report.

The investment portfolio mix at fair value as of the end of 2022 was 0.2% debt securities, 0.3% equities, 0.1% private equity, 20.3% real assets, 0.0% short-term, and 0.2% absolute return. See MD&A and Investment Section for more detailed analysis and information. The Systems' investment outlook is long term, allowing the portfolio to take advantage of the favorable risk-return characteristics of equities by placing more emphasis on this category.

The Board utilizes internal and external portfolio managers employing both passive (indexed) and active strategies. The portfolio is broadly diversified among equities, debt securities, real assets, absolute return, and private equity with additional diversification achieved through domestic and international investing.

The investment policy is to minimize credit and market risks while maintaining a competitive yield on its portfolio. Accordingly, deposits are either insured by federal depository insurance or collateralized. All collateral on deposits is held in the counterparties' joint custody accounts at the Federal Reserve Bank. On occasion, deposits may be significantly greater than collateral due to investment purchase "fails," receipt of interest earnings on the 15th of each month, and proceeds from investment sales and maturities. Of approximately \$50.1 billion in both the Defined Benefit and Defined Contribution investments at fair value as of December 31, 2022, none of the investments were in the category of highest custodial credit risk as defined by GASB.

Funding

In setting contribution rates, the Board's principal objectives are to set rates so the unfunded actuarial accrued liability (UAAL) will be amortized over a reasonable period of time from the most recent valuation date and set rates so they remain relatively level over time. The Board's funding policy requires the employer contribution rate be at least equal to the sum of the employer normal cost rate (which pays the current year's cost) and an amortization rate that results in the amortization of the UAAL. Under this policy, the objective of maintaining a relatively level contribution rate over time is achieved in normal conditions such as consistent financial markets.

Letter of Transmittal *(Concluded)*

In determining the contribution rates, the actuary uses an actuarial value of assets that is based on a 5-year smoothed expected rate of return, wherein the excess or shortfall of investment income over or under the actuarial assumed income rate (currently 6.85%) is recognized over a 5-year period.

Funds are derived from the excess of additions, which include contributions and investment earnings, over deductions that are comprised of benefits and administrative expenses. Funds are accumulated to meet future benefit obligations to retirees and beneficiaries. This accumulated balance is referred to as the “net position restricted for pensions” in the Combined Statements of Fiduciary Net Position in the Financial Section of the report. The total pension liability is not reported in the basic financial statements, but is disclosed in Note 5 to the basic financial statements and in the required supplementary information. The total pension liability is determined by the actuary and is a measure of the present value of actuarial accrued liabilities estimated to be payable in the future to current retirees, beneficiaries, and employees for service earned to date. The net pension liability is measured as the total pension liability less the amount of the pension plan’s fiduciary net position. The net pension liability is an accounting measurement for financial statement purposes.

Independent Audit

An annual audit of the Systems and Plans was conducted by the independent accounting firm of Eide Bailly, LLP. The auditor’s report on the basic financial statements is included in the Financial Section of this report.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Utah Retirement Systems for its Annual Comprehensive Financial Report for the fiscal year ended December 31, 2021. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized annual comprehensive financial report, whose contents conform to program standards. Such financial reports must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. The Utah Retirement Systems has received a Certificate of Achievement for the last 38 years. We believe our current report continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to the GFOA.

In addition, the Utah Retirement Systems was awarded the Public Pension Coordinating Council Public Pension Standards 2022 Award. This award is in recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

Acknowledgments

The compilation of this report reflects the combined efforts of the staff under the leadership of the Utah State Retirement Board. The report is intended to provide extensive and reliable information for making management decisions, determining compliance with legal provisions, and determining responsible stewardship for the assets contributed by the Systems’ members and their employers.

We would like to take this opportunity to express our gratitude to the Board, the staff, the advisors, and the many people who have worked so diligently to ensure the successful operation and financial soundness of the Utah Retirement Systems.

Sincerely yours,



Robert D. Dolphin
Chief Financial Officer



Daniel D. Andersen
Executive Director

Utah Retirement Systems

Board President's Letter

UTAH STATE RETIREMENT BOARD
UTAH RETIREMENT SYSTEMS
560 East 200 South
Salt Lake City, Utah 84102-2044
801-366-7700
800-365-8772
801-366-7734 FAX

DANIEL D. ANDERSEN
EXECUTIVE DIRECTOR

May 31, 2023

Utah State Retirement Board
560 East 200 South
Salt Lake City, UT 84102-2044

Dear URS Members:

The URS Pension Fund lost about 5% of its value in 2022.

It performed exactly the way it's intended.

Of course, we don't put the rigorous care into managing this fund with the aim of losing money. But year-to-year market fluctuations are a fact of life, and our goal is to meet our return objectives while minimizing risk and preserving capital in challenging markets. Financial markets in 2022 could certainly be described as challenging. Major stock indexes suffered their worst year since 2008, with the S&P 500 Index, for example, falling almost 20%. In this tough environment, the median U.S. public pension plan lost 12.7% of its value, according to the Callan Institute. The URS Pension Fund, meanwhile, suffered relatively small losses compared to peers and the broader investment landscape.

It performed exactly the way it's intended.

Under the Direction of the Utah State Retirement Board, URS invests with a careful eye on downside protection. To preserve capital in negative equity markets, we own a diverse range of assets, including stocks, bonds, real assets, and private equity, as well as assets designed to achieve returns with little correlation to others. The Board invests in accordance with its fiduciary responsibilities, following the prudent investor rule, for the sole purpose of maximizing the risk-adjusted returns for the benefit of Utah public employees.

When the bulls return, URS might not outperform portfolios with higher allocations to public equity. But in years like 2022, our strategy really pays off. By better preserving principal, the URS Pension Fund is positioned for greater future compounding and long-term wealth.

The ultimate goal is to produce stable, long-term returns for the retirement security of Utah public employees across generations. It's for you to enjoy a satisfying, financially secure retirement. When we see URS touch people's lives this way, we're pleased that our work is paying off exactly the way it's intended.

Sincerely,



Richard K. Ellis
President, Utah State Retirement Board

Utah Retirement Systems

Retirement Board

As of December 31, 2022



Pictured Left to Right

Ryan G. Hessenthaler
Appointed August 19, 2015
Term Expires July 1, 2023
Represents Investment Community

Larry W. Evans
Appointed August 21, 2019
Term Expires July 1, 2024
Represents Public Employees

Christie N. Behunin
Appointed August 17, 2022
Term Expires July 1, 2026
Represents Investment Community

Roger G. Donohoe
Appointed December 17, 2014
Term Expires July 1, 2024
Represents Education Employees

President
Richard K. Ellis
Appointed February 13, 2020
Term Expires July 1, 2024
Represents Investment Community

Vice-President
Karl W. Wilson
Appointed July 2, 2021
Term Expires July 1, 2025
Represents Investment Community

Marlo M. Oaks
State Treasurer
Member Since June 29, 2021
Ex-officio Member

Executive Director



Daniel D. Andersen

Membership Council

Executive Committee Members:

Chairperson

Mr. Marty Peterson Represents Professional Firefighters of Utah

Vice-Chairperson

Ms. Amy Ehresman Represents Utah School Employees' Association

Senior Trooper Arlow Hancock Represents Utah Peace Officers' Association

Mr. Brad Hardesty Represents Utah Public Employees' Association – Retirees

Mr. Larry Millward Represents Utah Retired School Employees' Association

Council Members:

Mr. LeGrand Bitter Represents Utah Association of Special Districts

Mr. Jamie Davidson Represents Utah League of Cities and Towns

Ms. Sandy Gustaveson Represents Utah Public Employees' Association

Mr. Rod Hurd Represents Utah Education Association

Mr. Dan Jessen Represents Utah Association of Counties

Ms. Tina McMullin Represents Utah Education Association

Ms. Sheri Nelson Represents Utah Public Employees' Association

Honorable Kara Pettit Represents Utah Judicial Council

Mr. Zane Woolstenhulme Represents Utah Association of School Business Officials

Organization Chart

As of December 31, 2022



Administrative Staff

Daniel D. Andersen
Executive Director

Mark M. Cain
Deputy Executive Director

Steven M. West
Director, Internal Audit

Dee S Larsen
General Counsel

John D. Skjervem
Chief Investment Officer

Jayne R. Knecht
Director, Human Resources

W. Kendall Rima
Chief Information Officer

Robert D. Dolphin
Chief Financial Officer

David J. Bjarnason
Chief Compliance Officer – Investments

James Hammer
Director, Employer Services

Craige D. Stone
Director, Defined Contribution Savings Plans

Stacey Nielson
Director, Retirement Benefits


Ryan C. Ashcraft
Director, Retirement Planning

Tiffany G. Lund
Project Management Director

Utah State Retirement Board



Executive Director
.....
Daniel D. Andersen



Deputy Executive Director
.....
Mark M. Cain



Director Internal Audit
.....
Steven M. West

Professional Service Providers

Actuary

Gabriel, Roeder, Smith & Company
5605 N. MacArthur Blvd., Suite 870
Irving, TX 75038-2631

Auditor

Eide Bailly LLP
Certified Public Accountants
5 Triad Center, Suite 600
Sat Lake City, UT 84180


Additional professional service providers are presented on pages [186](#) and [192](#).

A schedule of investment fees and commissions are presented on pages [185](#) and [191](#).



Director Employer Services
.....
James Hammer

- Records Management
- Employer Contributions Reporting
- Member Account Management
- Defined Contribution Daily Trade Reconciliation
- Employer Compliance and Auditing




Director Defined Contribution Savings Plans
.....
Craig D. Stone

- 401(k) Plan
- 457(b) Plan
- Traditional IRA
- Roth IRA



Director Retirement Benefits
.....
Stacey Nielsen

- Retirement Benefits
- Death Benefits
- Redeposits and Purchases
- Refunds
- Branch Office



Director Retirement Planning
.....
Ryan C. Ashcraft

- Member Education
- Retirement Planning
- Seminars
- Stakeholder Relations



Project Management Director
.....
Tiffany G. Lund

- Project Management Office
- Business Requirements
- Project Scope Implementation

Noncontributory Retirement System Highlights



Composite Picture

Total Membership	158,118	2022 Active Members	45,437	2022 Retirees	3,287
Active	45,437	Average Age	51.5	Average Age	64.3
Terminated vested	47,415	Average years of service	18.6	Average years of service	21.7
Retired	65,266	Average annual salary	\$73,277	Final average annual salary	\$60,675
				Average annual benefit	\$27,325
				Average annual benefit — all retirees	\$25,102

Noncontributory Retirement System
Highlights (Concluded)

The Public Employees Noncontributory Retirement System includes eligible public employees of the State of Utah and its political subdivisions and public education employees of those entities covered by the System.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	30	None
Any age	25	Full actuarial before age 65
60	20	3% each year before age 65
62	10	3% each year before age 65
65	4	None

Service Benefit Formula

Number of years of service x 2.00% x FAS.*

*FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

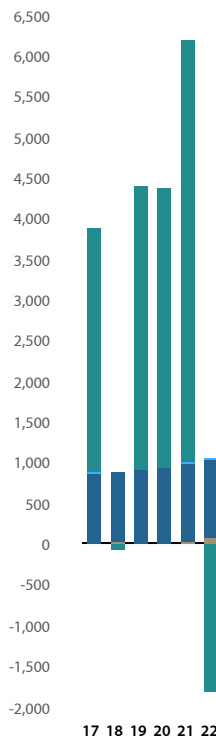
Up to 4% annually on original retirement benefit.

Contribution Rates (as of 12-31-2022)

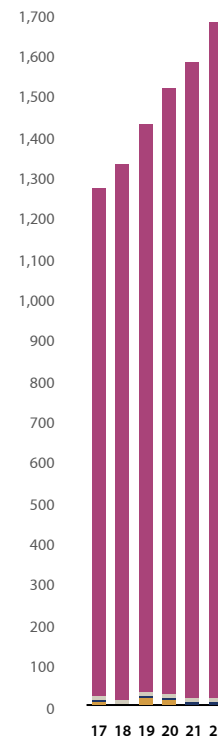
Employer rate for the State and School Division (Level A) is 22.19% of covered salary and 17.97% for the Local Government Division (Level B).

For more detail see Summary of Plan Provisions on page 220.

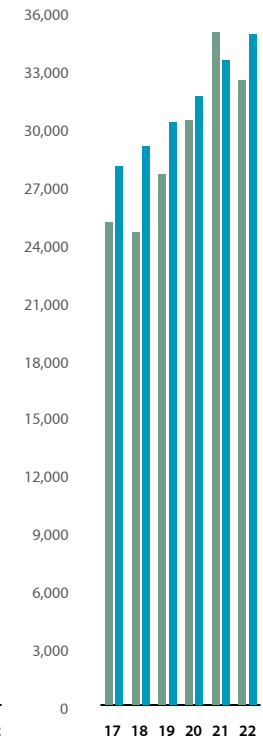
Additions by Source
(in millions)



Deductions by Type
(in millions)



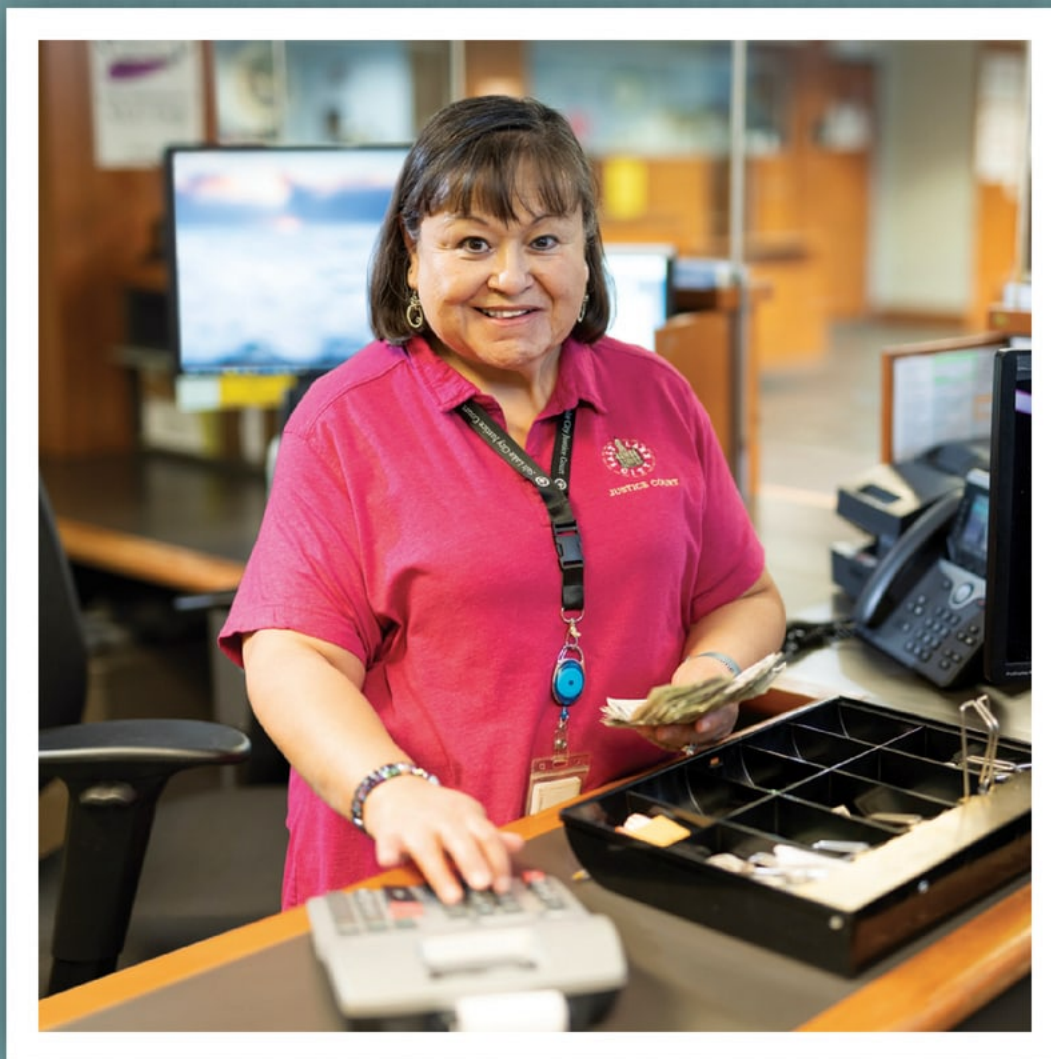
Schedule of Employers Net Pension Liability
(dollars in millions)



Noncontributory	2017	2018	2019	2020	2021	2022
Additions by Source (in millions)						
Investment income (loss)	\$ 2,987.3	(92.2)	3,499.2	3,431.0	5,201.8	(1,833.6)
Member contributions	17.3	14.6	11.7	16.4	16.2	15.4
Employer contributions	854.3	858.4	888.1	912.5	942.9	969.9
Transfers from systems	—	13.0	—	—	6.0	58.6
Totals	\$ 3,858.9	793.8	4,399.0	4,359.9	6,166.8	(789.6)
Deductions by Type (in millions)						
Benefit payments	\$ 1,248.0	1,320.2	1,397.0	1,488.6	1,565.0	1,662.6
Administrative expense	9.6	10.0	9.4	9.8	10.0	10.4
Refunds	4.6	2.8	3.1	2.3	1.3	3.3
Transfers to systems	10.2	—	19.6	17.0	—	—
Totals	\$ 1,272.4	1,333.0	1,429.1	1,517.7	1,576.4	1,676.3
Schedule of Employers Net Pension Liability (dollars in millions)						
Total pension liability	\$ 28,088.6	29,122.9	30,351.8	31,763.9	33,566.8	34,931.4
Statement of plan net position	25,205.1	24,666.1	27,635.9	30,478.1	35,068.5	32,602.6
Net pension liability (asset)	\$ 2,883.5	4,456.8	2,715.9	1,285.8	(1,501.7)	2,328.8

Pictured: Abby Williams, Assistant Office Manager / Water Conservation Coordinator, Kearns Improvement District

Contributory Retirement System Highlights



Composite Picture

Total Membership	4,655	2022 Active Members	253	2022 Retirees	66
Active	253	Average Age	59.7	Average Age	65.1
Terminated vested	908	Average years of service	31.2	Average years of service	31.5
Retired	3,494	Average annual salary	\$73,706	Final average annual salary	\$65,173
				Average annual benefit	\$43,735
				Average annual benefit — all retirees	\$25,970

Contributory Retirement System
Highlights (Concluded)

The Public Employees Contributory Retirement System includes eligible public employees of the State of Utah and its political subdivisions and public education employees of those entities covered by the System.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	30	None
60	20	3% each year before age 65
62	10	3% each year before age 65
65	4	None

Service Benefit Formula

1. Number of years of service before 7-1-75 x 1.25% x FAS.*
2. Number of years of service after 6-30-75 x 2.00% x FAS.*
3. Plan 1 allowance = total of 1 and 2.

*FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

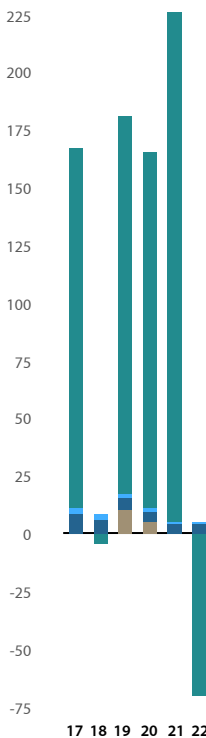
Up to 4% annually on original retirement benefit.

Contribution Rates (as of 12-31-2022)

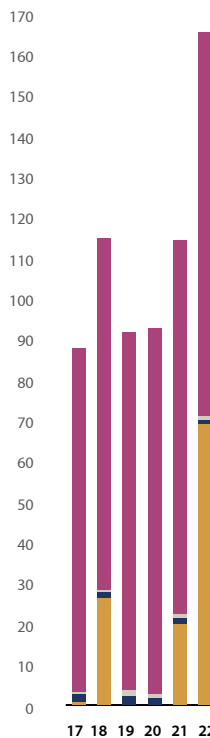
Member rate is 6.00% of covered salary. Employer rate for the State and School Division (Level A) is 17.70% of covered salary and 13.96% for the Local Government Division (Level B).

For more detail see Summary of Plan Provisions on page 221.

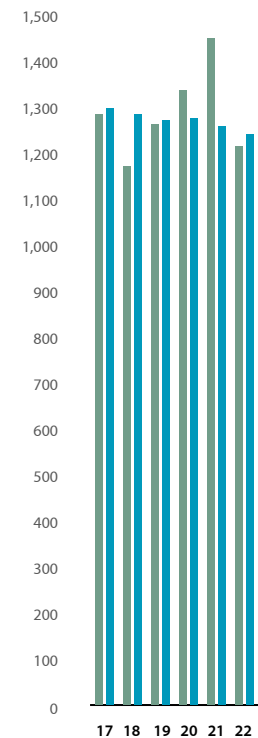
Additions by Source
(in millions)



Deductions by Type
(in millions)



Schedule of Employers Net Pension Liability
(dollars in millions)



Contributory	2017	2018	2019	2020	2021	2022
Additions by Source (in millions)						
Investment income (loss)	\$ 155.9	(4.5)	163.9	154.4	220.0	(70.7)
Member contributions	2.7	2.5	2.0	1.7	1.4	1.2
Employer contributions	7.9	6.0	5.4	4.8	4.2	3.7
Transfers from systems	—	—	9.8	4.5	—	—
Totals	\$ 166.5	4.0	181.1	165.4	225.6	(65.8)
Deductions by Type (in millions)						
Benefit payments	\$ 84.8	86.8	88.2	89.9	91.7	94.4
Administrative expense	0.5	0.5	0.4	0.4	0.4	0.4
Refunds	1.6	1.5	2.7	1.8	1.6	0.8
Transfers to systems	1.2	26.3	—	—	20.3	69.5
Totals	\$ 88.1	115.1	91.3	92.1	114.0	165.1
Schedule of Employers Net Pension Liability (dollars in millions)						
Total pension liability	\$ 1,298.2	1,284.0	1,270.1	1,272.7	1,256.6	1,238.8
Statement of plan net position	1,283.5	1,172.4	1,262.3	1,335.6	1,447.2	1,216.4
Net pension liability (asset)	\$ 14.7	111.6	7.8	(62.9)	(190.6)	22.4

Pictured: Ramona Clark, Justice Court Accountant, Salt Lake City Justice Court

Public Safety

Retirement System Highlights



Composite Picture

Total Membership	15,737	2022 Active Members	3,918	2022 Retirees	273
Active	3,918	Average Age	45.8	Average Age	53.5
Terminated vested	4,673	Average years of service	18.5	Average years of service	22.7
Retired	7,146	Average annual salary	\$85,018	Final average annual salary	\$71,463
				Average annual benefit	\$38,754
				Average annual benefit — all retirees	\$32,817

Public Safety Retirement System
Highlights (Concluded)

The Public Safety Retirement System includes eligible state and local government employees directly involved in law enforcement. The Public Safety System consists of the Noncontributory and Contributory divisions.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

Service Benefit Formula

1. 2.5% x FAS* x years of service up to 20 years.
2. 2.0% x FAS* x years of service over 20 years.
3. Monthly benefit = total of 1 and 2.

*FAS (Final Average Salary) = highest three years' eligible earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

Up to 2.5% or 4.0% (depending on employer) annually on original retirement benefit.

Contribution Rates (as of 12-31-2022)

Noncontributory: Employer rates range from 32.28% to 50.38% of covered salary.

Contributory: Member rates range from 10.50% to 12.29% of covered salary. Employer rates range from 22.79% to 27.98% of covered salary.

For more detail see Summary of Plan Provisions on page 222.

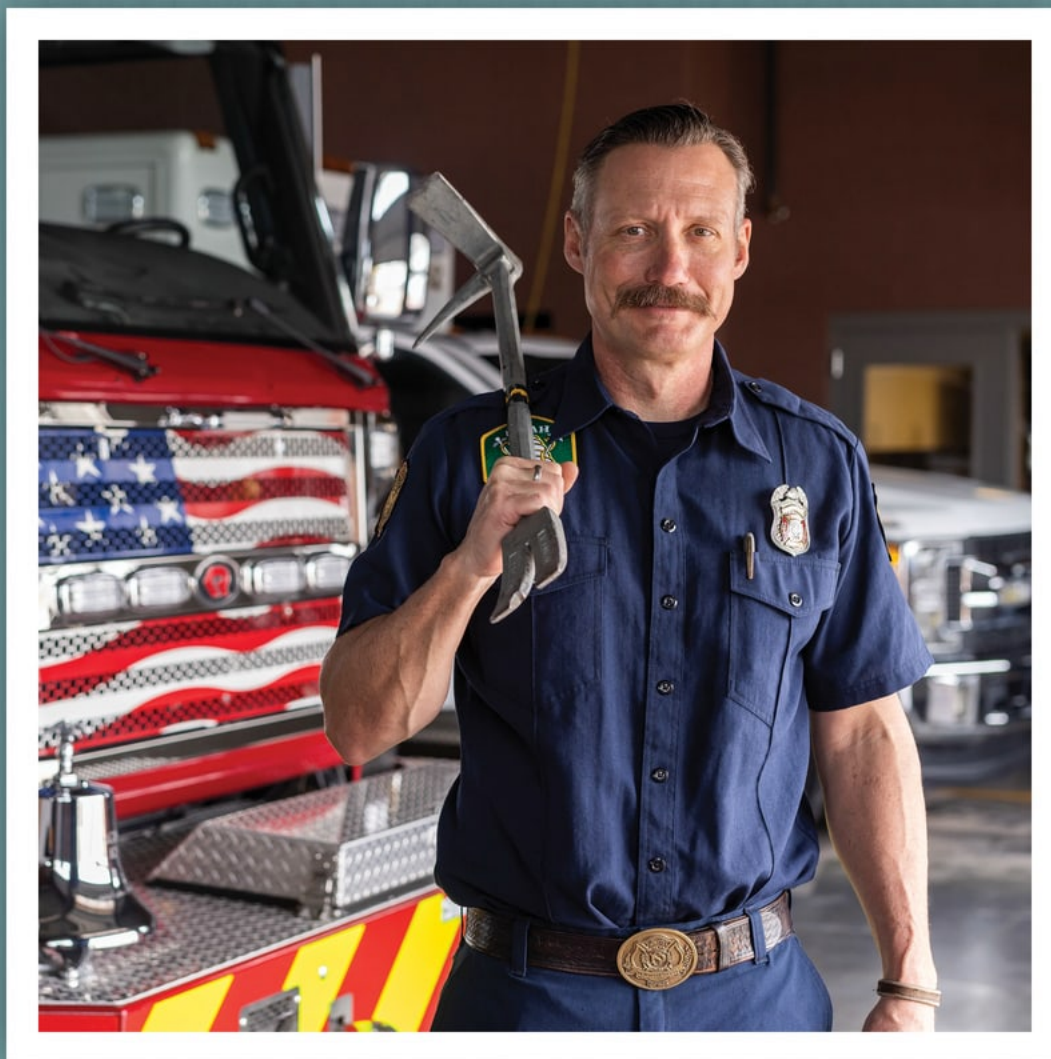


Public Safety	2017	2018	2019	2020	2021	2022
Additions by Source (in millions)						
Investment income (loss)	\$ 421.9	(13.1)	502.7	496.7	756.1	(267.4)
Member contributions	0.8	0.9	0.9	0.6	1.4	1.0
Employer contributions	145.8	147.1	150.5	150.5	152.5	168.5
Transfers from systems	5.9	7.0	5.5	7.4	8.0	5.4
Totals	\$ 574.4	141.9	659.6	655.2	918.0	(92.5)
Deductions by Type (in millions)						
Benefit payments	\$ 172.9	188.4	201.9	215.3	233.5	241.8
Administrative expense	1.4	1.5	1.4	1.4	1.5	1.5
Refunds	0.2	0.4	0.1	0.1	—	0.6
Totals	\$ 174.5	190.3	203.4	216.8	235.0	243.9
Schedule of Employers Net Pension Liability (dollars in millions)						
Total pension liability	\$ 4,085.2	4,258.2	4,460.4	4,694.2	4,925.5	5,115.4
Statement of plan net position	3,576.5	3,528.1	3,984.2	4,422.5	5,105.4	4,769.2
Net pension liability (asset)	\$ 508.7	730.1	476.2	271.7	(179.9)	346.2

Pictured: Travis Willinger, Sergeant, St. George Police Department

Firefighters

Retirement System Highlights



Composite Picture

Total Membership	3,407	2022 Active Members	1,289	2022 Retirees	60
Active	1,289	Average Age	46.8	Average Age	54.7
Terminated vested	467	Average years of service	18.9	Average years of service	25.2
Retired	1,651	Average annual salary	\$89,157	Final average annual salary	\$89,724
				Average annual benefit	\$53,600
				Average annual benefit — all retirees	\$41,521

Firefighters Retirement System
Highlights (Concluded)

The Firefighters Retirement System includes eligible state and local government employees directly involved in fire fighting and whose duties are classified as hazardous.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

Service Benefit Formula

- 2.5% x FAS* x years of service up to 20 years.
- 2.0% x FAS* x years of service over 20 years.
- Monthly benefit = total of 1 and 2.

*FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

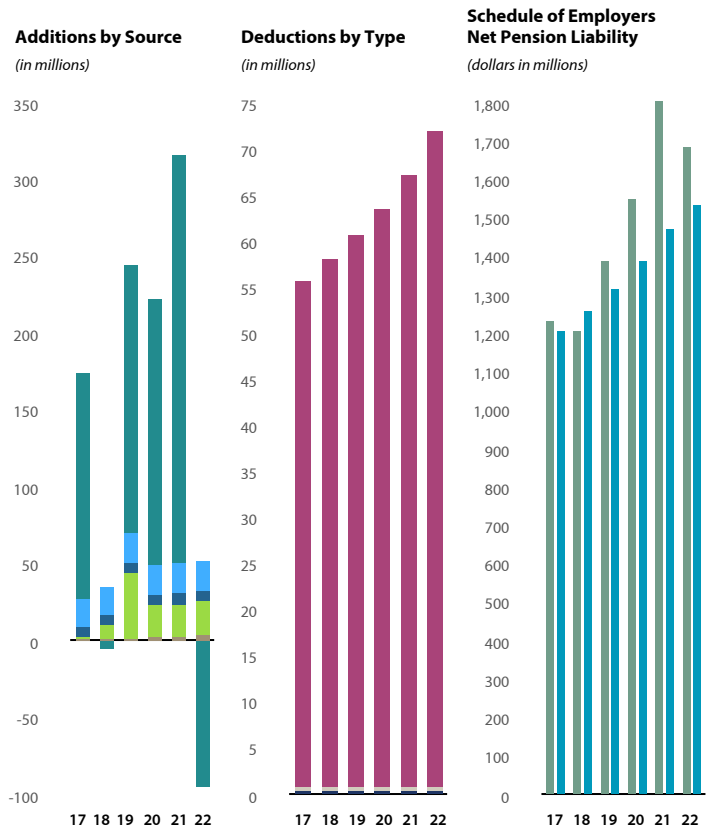
Cost-of-Living Allowance

Up to 4.0% annually on original retirement benefit.

Contribution Rates (as of 12-31-2022)

Member rate for Division A (with Social Security) is 15.05% of covered salary and for Division B (without Social Security) is 16.71% of covered salary. Employer rate for Division A is 3.61% of covered salary and 6.24% for Division B.

For more detail see Summary of Plan Provisions on page 224.



Firefighters	2017	2018	2019	2020	2021	2022
Additions by Source (in millions)						
Investment income (loss)	\$ 146.7	(4.5)	174.1	173.8	265.9	(94.4)
Member contributions	18.5	18.3	18.7	18.7	19.0	19.3
Employer contributions	6.7	7.0	7.4	7.5	7.5	6.5
Fire insurance tax	1.2	8.7	41.9	20.3	21.1	22.7
Transfers from systems	1.3	1.9	2.0	2.8	3.0	3.5
Totals	\$ 174.4	31.4	244.1	223.1	316.5	(42.4)
Deductions by Type (in millions)						
Benefit payments	\$ 54.8	57.4	59.8	62.8	66.4	71.0
Administrative expense	0.4	0.4	0.4	0.4	0.4	0.5
Refunds	0.2	0.4	0.1	0.1	0.2	0.4
Totals	\$ 55.4	58.2	60.3	63.3	67.0	71.9
Schedule of Employers Net Pension Liability (dollars in millions)						
Total pension liability	\$ 1,205.7	1,261.3	1,316.6	1,388.5	1,470.6	1,533.4
Statement of plan net position	1,234.4	1,207.9	1,391.6	1,551.2	1,799.5	1,685.2
Net pension liability (asset)	\$ (28.7)	53.4	(75.0)	(162.7)	(328.9)	(151.8)

Pictured: Shane Horton, Engineer, South Davis Metro Fire Department

Judges

Retirement System Highlights



Composite Picture

Total Membership	293	2022 Active Members	119	2022 Retirees	4
Active	119	Average Age	54.7	Average Age	64.0
Terminated vested	10	Average years of service	14.3	Average years of service	24.0
Retired	164	Average annual salary	\$183,837	Final average annual salary	\$174,079
				Average annual benefit	\$138,998
				Average annual benefit — all retirees	\$105,684

Judges Retirement System
Highlights (Concluded)

The Judges Retirement System includes justices and judges of the courts of record authorized in state statutes.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	25	None
55	20	Full actuarial reduction
62	10	None
70	6	None

Service Benefit Formula

- 5.00% x FAS* x years of service up to 10 years.
- 2.25% x FAS* x years of service between 10 and 20 years.
- 1.00% x FAS* x years of service over 20 years.
- Monthly benefit = total of 1, 2, and 3.

*FAS (Final Average Salary) = highest two years' eligible earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

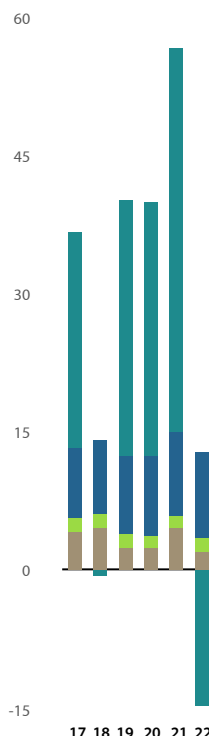
Up to 4.0% compounded annually.

Contribution Rates (as of 12-31-2022)

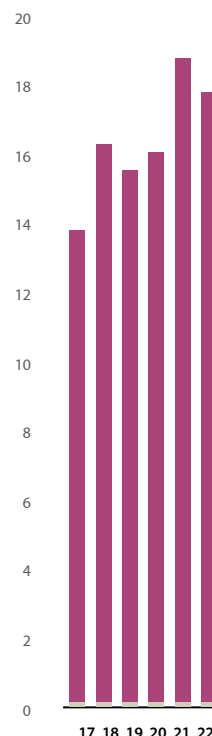
Employer rates is 44.76% of covered salary.

For more detail see Summary of Plan Provisions on page 226.

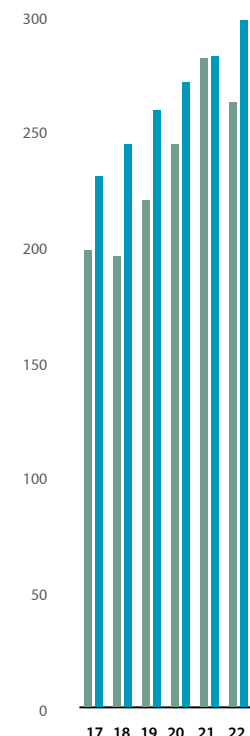
Additions by Source
(in millions)



Deductions by Type
(in millions)



Schedule of Employers Net Pension Liability
(dollars in millions)



Judges	2017	2018	2019	2020	2021	2022
Additions by Source (in thousands)						
Investment income (loss)	\$ 23,435	(730)	27,775	27,391	41,716	(14,729)
Employer contributions	7,563	8,091	8,500	8,646	8,949	9,378
Court fees	1,477	1,518	1,536	1,410	1,354	1,335
Transfers from systems	4,090	4,403	2,339	2,340	4,563	1,990
Totals	\$ 36,565	13,282	40,150	39,787	56,582	(2,026)
Deductions by Type (in thousands)						
Benefit payments	\$ 13,621	16,111	15,346	15,863	18,600	17,609
Administrative expense	79	84	81	84	85	88
Totals	\$ 13,700	16,195	15,427	15,947	18,685	17,697
Schedule of Employers Net Pension Liability (dollars in thousands)						
Total pension liability	\$ 231,069	244,209	259,181	271,116	282,957	297,575
Statement of plan net position	198,483	195,570	220,293	244,133	282,030	262,307
Net pension liability	\$ 32,586	48,639	38,888	26,983	927	35,268

Pictured: David Connors, District Court Judge, State of Utah

Utah Governors and Legislators Retirement System Highlights



Composite Picture

Total Membership	351	2022 Active Members	44	2022 Retirees	3
Active	44	Average Age	59.3	Average Age	69.3
Terminated vested	70	Average years of service	15.2	Average years of service	9.3
Retired	237	Average annual salary	N/A	Final average annual salary	N/A
				Average annual benefit	\$3,984
				Average annual benefit — all retirees	\$4,199

Utah Governors and Legislators Retirement Plan
Highlights (Concluded)

The Utah Governors and Legislators Retirement Plan includes governors and legislators of the State of Utah.

Service Retirement

Age	Years of Service	Allowance Reduction
Governors:		
65	1 term	None
62	10 years	3% each year before age 65
Legislators:		
65	4	None
62	10	3% each year before age 65

Service Benefit Formula

Governors: \$500*per month per term.
 *Increased semi annually up to 2% based on the Consumer Price Index. The amount as of 12-31-2022 is \$1,480.

Legislators: \$10**per month each year of services a legislator.
 **Increased semi annually up to 2.0% based on the Consumer Price Index. The amount as of 12-31-2022 is \$32.00.

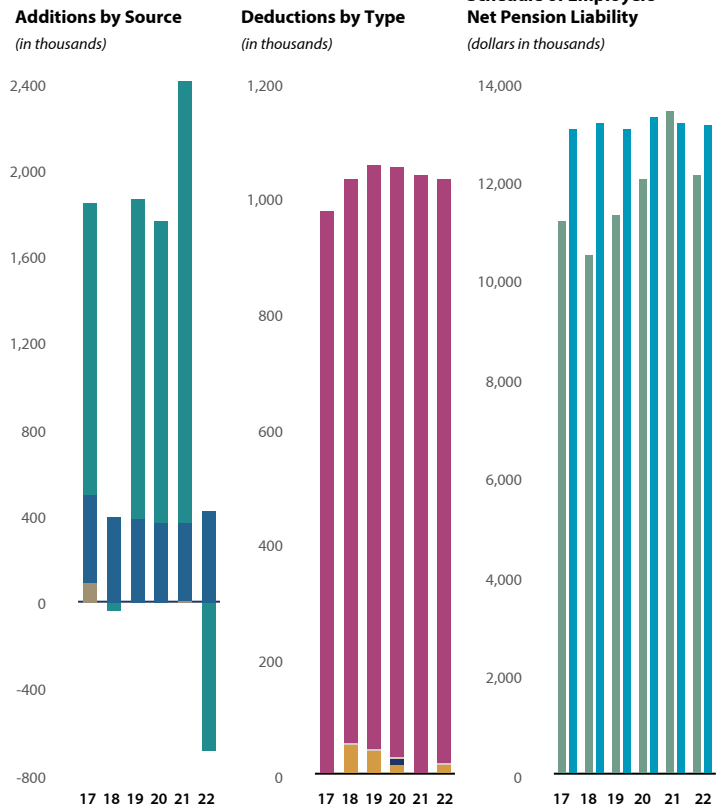
Cost-of-Living Allowance

Up to 4.0% annually on original retirement benefit.

Contribution Rates (as of 12-31-2022)

There was a 2022-23 appropriation payable by June 30, 2023, to the Utah Governors and Legislators Retirement Plan of \$359,939.

For more detail see Summary of Plan Provisions on page 227



Utah Governors and Legislators	2017	2018	2019	2020	2021	2022
Additions by Source (in thousands)						
Investment income (loss)	\$ 1,353	(41)	1,481	1,396	2,042	(693)
Employer contributions	404	392	384	369	361	422
Transfers from systems	89	—	—	—	7	—
Totals	\$ 1,846	351	1,865	1,765	2,410	(271)
Deductions by Type (in thousands)						
Benefit payments	\$ 973	978	1,012	1,023	1,036	1,010
Administrative expense	5	5	4	4	4	4
Refunds	—	—	—	10	—	—
Transfers to systems	—	51	42	17	—	18
Totals	\$ 978	1,034	1,058	1,054	1,040	1,032
Schedule of Employers Net Pension Liability (dollars in thousands)						
Total pension liability	\$ 13,074	13,177	13,053	13,330	13,202	13,166
Statement of plan net position	11,220	10,537	11,344	12,055	13,425	12,122
Net pension liability (asset)	\$ 1,854	2,640	1,709	1,275	(223)	1,044

Pictured: State of Utah Capitol Building

Tier 2 Public Employees Contributory Retirement System Highlights



Composite Picture

Total Membership	50,735	2022 Active Members	43,105	2022 Retirees	160
Active	43,105	Average Age	38.6	Average Age	67.6
Terminated vested	7,173	Average years of service	4.1	Average years of service	7.4
Retired	457	Average annual salary	\$53,881	Final average annual salary	\$49,711
				Average annual benefit	\$5,341
				Average annual benefit — all retirees	\$4,008

Tier 2 Public Employees Contributory Retirement System
Highlights (Concluded)

The Tier 2 Public Employees Contributory Retirement System includes eligible employees of the State of Utah and its political subdivisions and public education employees of those entities covered by the System.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	35	None
60	20	Full actuarial before age 65
62	10	Full actuarial before age 65
65	4	None

Service Benefit Formula

Number of years of service 1.50% x FAS.*

*FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

Up to 2.5% annually on original retirement benefit.

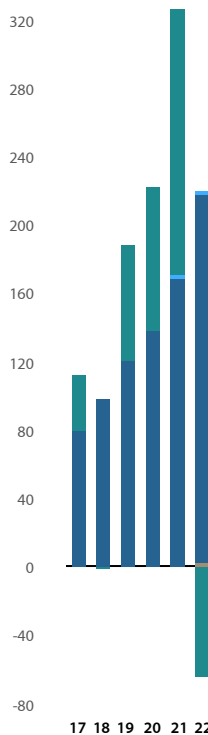
Contribution Rates (as of 12-31-2022)

Member rate 0.00% of covered salary.
 Employer rate range from 16.19% to 20.02% of covered salary.

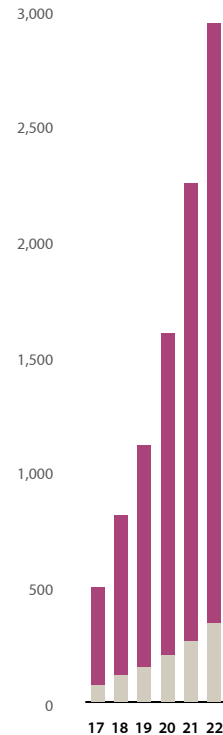
(Includes active member death benefit and Tier 1 amortization rate.)

For more detail see Summary of Plan Provisions on page 228.

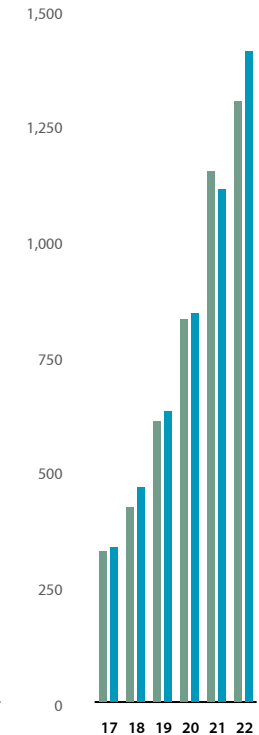
Additions by Source
(in millions)



Deductions by Type
(in thousands)



Schedule of Employers Net Pension Liability
(dollars in millions)



Tier 2 Public Employees	2017	2018	2019	2020	2021	2022
Additions by Source (in thousands)						
Investment income (loss)	\$ 33,249	(1,454)	68,228	84,040	155,495	(65,084)
Member contributions	—	—	—	—	57	164
Employer contributions	79,175	97,680	119,839	138,466	168,232	217,179
Transfers from systems	—	—	—	—	—	1
Totals	\$ 112,424	96,226	188,067	222,506	323,784	152,260
Deductions by Type (in thousands)						
Benefit payments	\$ 417	692	965	1,397	1,982	2,602
Administrative expense	82	119	152	207	269	345
Totals	\$ 499	811	1,117	1,604	2,251	2,947
Schedule of Employers Net Pension Liability (dollars in thousands)						
Total pension liability	\$ 338,035	467,461	634,074	846,868	1,111,694	1,412,220
Statement of plan net position	329,218	424,633	611,583	832,485	1,154,018	1,303,331
Net pension liability (asset)	\$ 8,817	42,828	22,491	14,383	(42,324)	108,889

Pictured: Brianna Johnson, Teacher, Granite School District

Tier 2 Public Safety and Firefighter Contributory Retirement System Highlights



Composite Picture

Total Membership	5,863	2022 Active Members	5,326	2022 Retirees	—
Active	5,326	Average Age	31.8	Average Age	—
Terminated vested	530	Average years of service	4.5	Average years of service	—
Retired	7	Average annual salary	\$60,344	Final average annual salary	\$—
				Average annual benefit	\$—
				Average annual benefit — all retirees	\$6,054

Tier 2 Public Safety and Firefighter Contributory Retirement System Highlights *(Concluded)*

The Tier 2 Public Safety and Firefighter Contributory Retirement System includes eligible state and local government employees directly involved in law enforcement or directly involved in fire fighting and whose duties are classified as hazardous.

Service Retirement

Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

Age	Years of Service	Allowance Reduction
Any age	25	None
60	20	Full actuarial before age 65
62	10	Full actuarial before age 65
65	4	None

Service Benefit Formula

- Number of years of service before 7-1-2020
x 1.50% x FAS.*
- Number of years of after 6-30-2020
x 2.0% x FAS.*

Plan 1 allowance = total of 1 and 2.

*FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

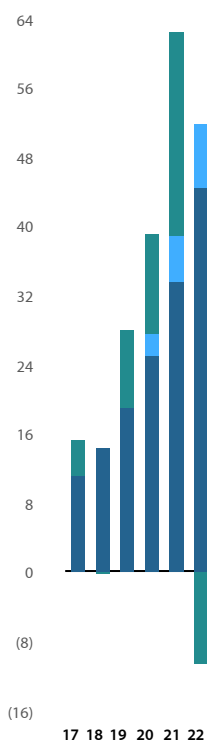
Up to 2.5% annually on original retirement benefit.

Contribution Rates *(as of 12-31-2022)*

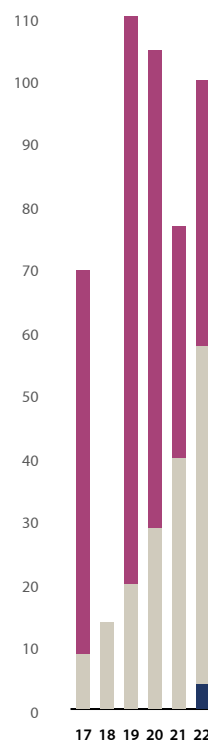
Member rate 2.59% of covered salary. Employer rate range from 14.08% to 40.97% of covered salary.

(Includes active member death benefit and Tier 1 amortization rate.)

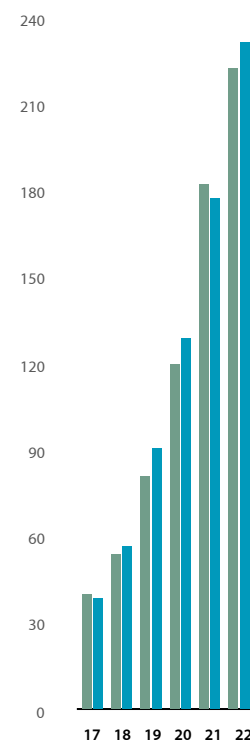
Additions by Source
(in millions)



Deductions by Type
(in thousands)



Schedule of Employers Net Pension Liability
(dollars in millions)



For more detail see Summary of Plan Provisions on page [229](#).

Tier 2 Public Safety and Firefighter

	2017	2018	2019	2020	2021	2022
Additions by Source <i>(in thousands)</i>						
Investment income (loss)	\$ 3,989	(180)	8,958	11,645	23,686	(10,791)
Member contributions	—	—	—	2,343	5,335	7,386
Employer contributions	11,126	14,295	18,197	25,020	33,406	44,272
Totals	\$ 15,115	14,115	27,155	39,008	62,427	40,867
Deductions by Type <i>(in thousands)</i>						
Benefit payments	\$ 61	—	90	76	37	42
Administrative expense	9	14	20	29	40	54
Refunds	—	—	—	—	—	4
Totals	\$ 70	14	110	105	77	100
Schedule of Employers Net Pension Liability <i>(dollars in thousands)</i>						
Total pension liability	\$ 39,023	56,841	90,787	129,253	177,580	231,743
Statement of plan net position	40,180	54,336	81,381	120,284	182,634	223,401
Net pension liability (asset)	\$ (1,157)	2,505	9,406	8,969	(5,054)	8,342

Pictured: Left: Kate Van Roosendaal, Trooper, Utah Highway Patrol; Right: Cameron Cessna, Firefighter, Riverdale Fire Department

Defined Contribution Savings Plans

The purpose of the Savings Plans (401(k), 457(b), Roth and Traditional IRAs) is to allow public employees throughout Utah to adequately prepare themselves for retirement by investing a portion of their income in one or more of these retirement plans.

It has long been recognized that for employees to experience the comfortable and rewarding retirement they desire, they cannot rely entirely upon Social Security and their employer-provided retirement. Employees should take the initiative to personally put aside a portion of their salary into some type of long-term savings plan.

Each year the number of employees participating in these plans increases. Individuals may participate in more than one plan. As of December 31, 2022, the number of participants by savings plan was as shown in the table below.

Annualized rates of returns for the Investment Funds are shown on pages 189 and 190.

The Plans provided the following benefits:

- » Convenient, automatic payroll deduction
- » 20 investment options
- » Brokerage window option
- » Tax-deferred and/or tax-free savings
- » Increase or decrease contributions as often as every pay period
- » Flexible payout options when eligible
- » Upon death, funds transfer to beneficiaries
- » No sales commissions
- » Low investment and administrative fees
- » Plan loans (401(k) and 457(b))
- » Hardship and emergency withdrawals
- » Local customer service and counseling.

Member Information

At December 31, 2022

	401(k)	457(b)	Roth IRA	Traditional IRA
Number of active employees eligible to participate	113,822	110,348	251,229	251,229
Employee contributions (excluding employer contributions):				
Number of employees contributing	44,985	9,332	12,768	869
Percent of eligible employees contributing	39.5%	8.5%	5.1%	0.3%
Average % of salary deferred by employees	5.9%	6.9%	N/A	N/A
Total participants	204,417	20,444	18,877	3,268
Average participant account balance	\$32,063	\$35,771	\$15,291	\$61,518

Savings Plans Member Balances

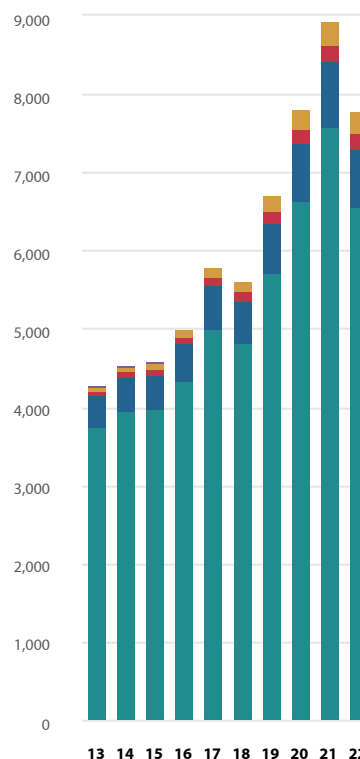
At December 31, (in millions)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
HRA*	16	20	23	—	—	—	—	—	—	—
Roth IRA	48	59	70	89	119	132	180	239	305	289
Traditional IRA	50	60	69	82	102	120	164	189	222	201
457(b)	425	451	454	494	569	544	645	751	851	731
401(k)	3,746	3,956	3,980	4,339	5,003	4,834	5,723	6,639	7,581	6,554
Totals	\$4,285	4,546	4,596	5,004	5,793	5,630	6,712	7,818	8,959	7,775

*Administration of the HRA was transferred to PEHP in October 2015. Columns may not total due to rounding.

Savings Plans Member Balances

(in millions)



Utah Retirement Systems

2022 Annual Comprehensive Financial Report

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Utah Retirement Systems

Independent Auditor's Report



To the Utah State Retirement Board
Utah Retirement Systems
Salt Lake City, Utah

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinions

We have audited the financial statements of each of the defined benefit pension plans and of the total combined defined contribution plans of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which comprise the statements of fiduciary net position of the pension (and other employee benefit) trust funds as of December 31, 2022, and the related statements of changes in fiduciary net position of the pension plan (and other employee benefit) trust funds for the year then ended, and the related notes to the financial statements, which collectively comprise Utah Retirement Systems' basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the pension (and other employee benefit) trust funds of each of the defined benefit pension plans and of the total combined defined contribution plans of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, as of December 31, 2022, and the changes in fiduciary net position of the pension (and other employee benefit) trust funds for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Utah Retirement Systems and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Emphasis of Matter

As discussed in Note 3 to the financial statements, the financial statements include investments that are not listed on national exchanges or for which quoted market prices are not available. These investments include private equities, absolute return, and investments in real assets. Such investments totaled \$22.0 billion (42.2% of total assets) at December 31, 2022. Where a publicly listed price is not available, the management of Utah Retirement Systems uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of the investments. Our opinions are not modified with respect to this matter.

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Independent Auditor's Report *(Continued)*

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Utah Retirement Systems' ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- » Exercise professional judgment and maintain professional skepticism throughout the audit.
- » Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- » Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Utah Retirement Systems' internal control. Accordingly, no such opinion is expressed.
- » Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- » Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Utah Retirement Systems' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, and the schedules of changes in the employers' net position liability, employers' net pension liability, employer contributions, and investment returns, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Independent Auditor's Report *(Continued)*

Supplementary Information

Our audit for the year ended December 31, 2022 was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Utah Retirement Systems' basic financial statements. The additional combining information for the total combined defined contribution plans on page 53 is presented for purpose of additional analysis of the financial statements rather than to present the fiduciary net position and the changes in fiduciary net position of the individual plans and is not a required part of the basic financial statements. The supplementary financial supporting schedules of individual retirement systems' schedules by division and schedules of administrative and investment expenses for the year ended December 31, 2022 as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements for the year ended December 31, 2022 and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional combining information and the supplemental financial reporting schedules for the year ended December 31, 2022 are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Report on Summarized Comparative Information

We have previously audited Utah Retirement Systems' 2021 basic financial statements, and we expressed an unmodified opinion on those audited financial statements in our report dated April 29, 2022, which included an emphasis-of-matter paragraph regarding the fair value of investments where a publicly listed price is not available. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2021 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic financial statements and our auditor's report thereon. The other information also includes the supplementary financial supporting schedules of individual retirement systems' schedules by division for all periods presented except the year ended December 31, 2022 referenced in the supplementary information section. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated May 31, 2023 on our consideration of Utah Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Utah Retirement Systems' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Utah Retirement Systems' internal control over financial reporting and compliance.



Salt Lake City, Utah
May 31, 2023

Independent Auditor's Report *(Concluded)*

To the Utah State Retirement Board
Utah Retirement Systems
Salt Lake City, Utah

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of each of the defined benefit plans and of the total combined defined contribution plans of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which comprise the statements of fiduciary net position (and other employee benefit) trust funds as of December 31, 2022 and the related statements of changes in fiduciary net position of the pension (and other employee benefit) trust funds for the year then ended, and the related notes to the financial statements, which collectively comprise Utah Retirement Systems' basic financial statements, and have issued our report thereon dated May 31, 2023, which included an emphasis-of-matter paragraph regarding the fair value of investments where a publicly listed price is not available.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Utah Retirement Systems' internal control over financial reporting (internal control) as a basis for designing procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Utah Retirement Systems' internal control. Accordingly, we do not express an opinion on the effectiveness of Utah Retirement Systems' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is

a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether Utah Retirement Systems' financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Salt Lake City, Utah
May 31, 2023

Management's Discussion and Analysis



Introduction

This section presents management's discussion and analysis of the Utah Retirement Systems' (URS) financial position and performance for the year ended December 31, 2022. It is presented as a narrative overview and analysis. Please read it in conjunction with the Letter of Transmittal included in the Introductory Section, the financial statements and other information that are presented in the Financial Section of this Annual Comprehensive Financial Report.

URS is responsible for administering retirement and defined contribution benefits for state, local government, and public education employees in the State of Utah. URS is composed of eight defined benefit pension systems (Systems) and four defined contribution plans (Plans). The eight defined benefit pension systems are the Public Employees Noncontributory Retirement System (Noncontributory System), the Public Employees Contributory Retirement System (Contributory System), the Public Safety Retirement System (Public Safety System), the Firefighters Retirement System (Firefighters System), the Judges Retirement System (Judges System), the Utah Governors and Legislators Retirement Plan (Governors and Legislators Plan), Tier 2 Public Employees Contributory Retirement System (Tier 2 Public Employees System), and

the Tier 2 Public Safety and Firefighter Contributory Retirement System (Tier 2 Public Safety and Firefighter System). The four defined contribution plans (Plans) are the 401(k), 457(b), and Roth and Traditional IRAs. All of these Systems and Plans are defined as pension (and other employee benefit) trust funds, which are fiduciary funds. Throughout this discussion and analysis, units of measure (i.e., billions, millions, thousands) are approximate, being rounded up or down to the nearest tenth of the respective unit value.

Financial Highlights

- » The URS Defined Benefit Pension Systems' combined total net position decreased by \$3.0 billion, or 6.6% during calendar year 2022. The decrease was primarily due to negative investment returns in the markets.
- » The URS Defined Benefit Pension Systems' rate of return on investments during calendar year 2022 was -5.04% compared with the calendar year 2021 rate of return of 17.46%. The decrease in rate of return was primarily due to the U.S. Federal Reserve's aggressive monetary policy tightening which triggered sharp declines in global stock and bond markets in 2022.

Management Discussion and Analysis *(Continued)*

- » The URS Defined Benefit Pension Systems had a Net Pension Liability of \$2.7 billion and the Net Pension Liability as a percentage of covered payroll was 43.5% as of December 31, 2022.
- » The Defined Contribution Plans' combined total net position decreased by \$1.3 billion during calendar year 2022 due to net investment losses.
- » The Defined Contribution Plans' rates of return for investment options ranged from a high of 1.85% to a low of -38.9% compared to prior year investment option returns of a high of 31.64% and a low of -0.96%.
- » The Statements of Fiduciary Net Position are presented for the pension trust funds at December 31, 2022, with combined total comparative information at December 31, 2021. These financial statements reflect the resources available to pay benefits to members, including retirees and beneficiaries, at the end of the years reported.
- » The Statements of Changes in Fiduciary Net Position are presented for the pension trust funds for the year ended December 31, 2022, with combined total comparative information for the year ended December 31, 2021. These financial statements reflect the changes in the resources available to pay benefits to members, including retirees and beneficiaries, for calendar years 2022 and 2021.

Overview of the Financial Statements

The URS 2022 financial statements, notes to the financial statements, and required supplementary information were prepared in conformity with *GASB Statement No. 67, Financial Reporting for Pension Plans*. This discussion and analysis is intended to serve as an introduction to the URS financial reporting, which is comprised of the following components:

- 1) basic financial statements,
- 2) notes to the basic financial statements,
- 3) required supplementary information, and
- 4) other supplementary schedules.

Collectively, this information presents the combined net position held in trust for pension benefits for each of the funds administered by URS as of December 31, 2022. This financial information also summarizes the combined changes in net position held in trust for pension benefits for the year then ended. The information in each of these components is briefly summarized as follows:

1) Basic Financial Statements

For the calendar year ended December 31, 2022, basic financial statements are presented for the fiduciary funds administered by URS. Fiduciary funds are used to account for resources held for the benefit of the participants outside of URS. The fiduciary funds are comprised of 12 pension (and other employee benefit) trust funds that consist of eight defined benefit systems and four defined contribution plans.

2) Notes to the Basic Financial Statements

The Notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements. Information in the Notes to the Basic Financial Statements is described as follows:

- » Note 1 provides a general description of URS, as well as a description of each of the Systems and Plans administered by URS and a summary of benefits. Information regarding employer and member participation in the Systems and Plans administered by URS is also provided.
- » Note 2 provides a summary of significant accounting policies including the basis of accounting, investment accounting policies, management's use of estimates, information regarding the implementation of new accounting pronouncements, and other significant accounting policies.
- » Note 3 describes deposits, investment risk disclosures, fair value measurements and related disclosures, and additional information about cash, securities lending, and derivatives.
- » Note 4 explains property and equipment of URS including depreciation and net carrying amounts.
- » Note 5 provides information about net pension liability of employers.
- » Note 6 provides information about contributions to the defined benefit systems administered by URS.
- » Note 7 explains transfers to or from affiliated systems.

Management Discussion and Analysis *(Continued)*

- » Note 8 describes supplemental benefits.
- » Note 9 provides information about litigation.
- » Note 10 describes commitments for investment funding.
- » Note 11 provides information about pension plan participation.
- » Note 12 provides information about URS post-employment benefits.
- » Note 13 describes compensated absences and insurance reserves.
- » Note 14 describes required supplementary information.
- » Note 15 provides information about risk management of URS.
- » Note 16 provides information about real estate liabilities.

3) Required Supplementary Information

The required supplementary information consists of four schedules of changes in employers' net pension liability, employers' net pension liability, employer contributions, and the money-weighted rate of investment returns of the defined benefit pension systems administered by URS.

4) Other Supplementary Schedules

Other schedules include more detailed information pertaining to the Systems and Plans as well as schedules of administrative and investment expenses.

Financial Analysis of the Systems — Defined Benefit Plan

Investments

Investments of the URS Defined Benefit Systems are combined in a commingled investment pool as authorized by state statute. Each system owns an equity position in the pool and receives proportionate investment income from the pool in accordance with each respective ownership percentage.

Each system's allocated share of each type of investment in the pool is shown in the Statements of Net Position. Investment gains or losses are reported in the Statements of Changes in Fiduciary Net Position. The rate of return on investments is therefore approximately the same for each of the systems.

Systems' Total Investments

As of December 31, 2022, URS Defined Benefit Systems had total net position of \$42.1 billion, a decrease of \$3.0 billion from calendar year 2021 investment totals. The combined investment portfolio experienced a return of -5.04% compared with the URS investment benchmark return of -9.05%. Investment results over time compared with URS benchmarks are presented in the Investment Section.

Because the investment results in all of the retirement systems was -5.04% of net position, further investment performance will not be evaluated in each respective system.

Equity Securities — As of December 31, 2022, URS Defined Benefit Systems held \$13.1 billion in U.S. and international equity securities, a decrease of \$3.8 billion from year 2021. Equity securities had a return of -16.16% for calendar year 2022 compared with the URS benchmark return of -18.27%.

Debt Securities — As of December 31, 2022, URS Defined Benefit Systems held \$6.5 billion in U.S. debt and international debt securities, an increase of \$1.0 billion from year 2021. Debt securities returned -13.33% in calendar year 2022 compared with the URS benchmark return of -13.73%.

Management Discussion and Analysis *(Continued)*

Real Assets — As of December 31, 2022, URS Defined Benefit Systems held \$8.6 billion in real assets investments, an increase of \$1.7 billion from year 2021. Real assets investments returned 14.83% in calendar year 2022 compared with the URS benchmark return of 11.27%.

Private Equity — As of December 31, 2022, URS Defined Benefit Systems held \$5.5 billion in private equity investments, a decrease of \$0.4 billion from year 2021. Private equity investments returned -6.28% in calendar year 2022. The URS benchmark for private equity investments was -16.54%.

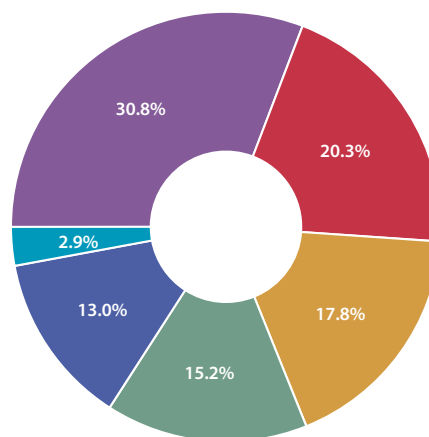
Short Term — As of December 31, 2022, URS Defined Benefit Systems held \$1.2 billion in short-term investments, a decrease of \$2.1 billion from year 2021. Short-term investments returned 6.34% in calendar year 2022 compared with the URS benchmark return of 1.46%.

Absolute Return — As of December 31, 2022, URS Defined Benefit Systems held \$7.5 billion in absolute return investments, an increase of \$0.7 billion from year 2021. Absolute return investments returned 5.58% in calendar year 2022 compared with the URS benchmark return of 6.46%.

Securities Lending — The Systems earn additional investment income by lending investment securities to brokers. This is done on a pooled basis by URS’ custodial bank, Northern Trust Company (NT). The brokers provide collateral to NT and generally use the borrowed securities to cover short sales and failed trades. NT invests the cash collateral received from the brokers in order to earn interest. As of December 31, 2022, the Systems had \$1.3 billion on loan secured by collateral of \$1.4 billion. For calendar year 2022, net securities lending income to the Systems amounted to \$5.0 million, a decrease of \$2.7 million over calendar year 2021. Security lending income decreased due to lower demand for securities lent compared to 2021.

Defined Benefit Systems Investments at Fair Value

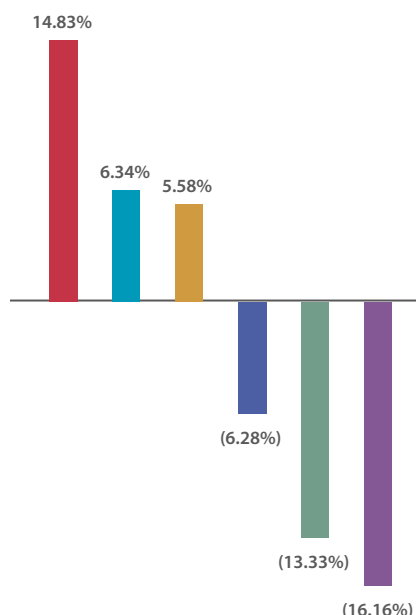
- Equity securities
- Debt securities
- Real assets
- Private equity
- Absolute return
- Short-term securities



Defined Benefit Systems Investment Rates of Return by Investment Type for 2022

(in percents)

- Real assets
- Short-term
- Absolute return
- Private equity
- Debt securities
- Equity securities



Management Discussion and Analysis *(Continued)*



Analysis of the Defined Benefit Systems

Noncontributory System

The Noncontributory System provides retirement benefits to covered State of Utah, local government, and public education employees. Benefits of the system are funded by employer contributions and by earnings on investments. The system net position as of December 31, 2022, totaled \$32.6 billion, a decrease of \$2.5 billion or 7.0% from \$35.1 billion as of December 31, 2021.

Additions to the Noncontributory System net position include employer contributions, investment income, and transfers. For the calendar year 2022, member and employer contributions increased from \$959.1 million for calendar year 2021 to \$985.3 million, an increase of \$26.2 million or 2.7%. Contributions increased because salaries increased. The system recognized a net investment loss of \$1.8 billion for calendar year 2022 compared with net investment gain of \$5.2 billion for calendar year 2021. The investment loss for 2022 compared to the gain in 2021 was due to the negative rate of return realized in 2022.

Deductions from the Noncontributory System net position include retirement benefits, administrative expenses, and transfers. For the calendar year 2022, benefits amounted to \$1.7 billion, an increase of \$99.6 million or 6.4% over calendar year 2021. The increase in benefit payments was due to an increased number of benefit recipients and cost of living benefit increases for benefit recipients. For the calendar year 2022, the cost of administering the system totaled \$10.4 million, an increase of \$353 thousand or 3.5% from calendar year 2021.

At December 31, 2022, the Noncontributory Retirement System total pension liability was \$34.9 billion. The Plan's fiduciary net position was \$32.6 billion leaving a net pension liability of \$2.3 billion. The Plan fiduciary net position as a percentage of the total pension liability was 93.3%.

Contributory System

The Contributory System provides retirement benefits to covered State of Utah, local government, and public education employees. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2022, totaled \$1.2 billion, a decrease of \$230.9 million or 16.0% from \$1.4 billion as of December 31, 2021.

Management Discussion and Analysis *(Continued)*

Additions to the Contributory System net position include employer and member contributions, investment income, and transfers. For calendar year 2022, member and employer contributions decreased from \$5.6 million for calendar year 2021 to \$4.9 million, a decrease of \$734 thousand or 13.0%. Contributions decreased because of the number of active members decreased since the Contributory System is a closed system. For this reason both the numbers of active members and retired individuals are declining. The system recognized a net investment loss of \$70.7 million for calendar year 2022 compared with net investment gain of \$220.0 million for the calendar year 2021. The investment loss for 2022 compared to the gain in 2021 was due to the negative rate of return realized in 2022.

Deductions from the Contributory System net position include retirement benefits, administrative expenses, and transfers. For calendar year 2022, benefits amounted to \$94.4 million, an increase of \$1.9 million or 2.0% from calendar year 2021. The increase in benefit payments was due to the increase in the number of retired members in the system and cost of living increases for benefit recipients. For calendar year 2022, the costs of administering the system totaled \$382 thousand, a decrease of \$6 thousand or 1.5% from calendar year 2021.

At December 31, 2022, the Contributory Retirement System total pension liability was \$1.24 billion. The Plan's fiduciary net position was \$1.22 billion leaving a net pension liability of \$22.4 million. The Plan fiduciary net position as a percentage of the total pension liability was 98.2%.

Public Safety System

The Public Safety System provides retirement benefits to eligible public safety employees of the State of Utah, local governments, and higher education. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2022, amounted to \$4.77 billion, a decrease of \$336.2 million or 6.6% from \$5.1 billion as of December 31, 2021.

Additions to the Public Safety System net position include employer contributions, investment income, and transfers. For calendar year 2022, member and employer contributions increased from \$153.9 million for calendar year 2021 to \$169.6 million, an increase of \$15.63 million or 10.2%. Contributions increased because average active

covered employee payroll increased by 15%. The system recognized a net investment loss of \$267.4 million for calendar year 2022 compared with a net investment gain of \$756.1 million for calendar year 2021. The investment loss for 2022 compared to the gain in 2021 was due to the negative rate of return realized in 2022.

Deductions from the Public Safety System net position include retirement benefits and administrative expenses. For calendar year 2022, benefits amounted to \$241.8 million, an increase of \$8.6 million or 3.7% over calendar year 2021. The increase in benefit payments was due to an increased number of benefit recipients and higher cost of living increases. For calendar year 2022, the costs of administering the system totaled \$1.5 million, an increase of \$47 thousand or 3.2% from calendar year 2021.

At December 31, 2022, the Public Safety Retirement System total pension liability was \$5.1 billion. The Plan's fiduciary net position was \$4.8 billion leaving a net pension liability of \$346.3 million. The Plan fiduciary net position as a percentage of the total pension liability was 93.2%.

Firefighters System

The Firefighters System provides retirement benefits to covered firefighters of the State of Utah and local governments. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2022, totaled \$1.69 billion, a decrease of \$114.2 million or 6.3% from \$1.80 billion as of December 31, 2021.

Additions to the Firefighters System net position consist of employer contributions, including insurance premium taxes, budget appropriations from the General Fund, investment income, and transfers. For calendar year 2022, member and employer contributions decreased from \$26.48 million for calendar year 2021 to \$25.74 million, a decrease of \$742 thousand or -2.8%. Contributions in calendar year 2022 decreased slightly due to a decrease in covered payroll offset by declining active members. The total fire insurance premiums and appropriations from the General Fund for calendar year 2022 were \$22.7 million compared to \$21.1 million in 2021, an increase of \$1.6 million or 7.6%. The system recognized a net investment loss of \$94.4 million for the calendar year 2022 compared with net investment gain of \$265.9 million for calendar year 2021. The investment loss for 2022 compared to the gain in 2021 was due to the negative rate of return realized in 2022.

Management Discussion and Analysis *(Continued)*

Statements of Fiduciary Net Position — Defined Benefit Pension Plans

December 31

(dollars in thousands)

	Noncontributory System			Contributory System		
	2022	2021	2020	2022	2021	2020
Assets:						
Cash and receivables	\$ 292,201	546,283	368,107	9,596	20,840	14,432
Investments at fair value	32,893,127	35,448,409	30,723,906	1,228,408	1,464,500	1,348,139
Invested securities lending collateral	1,079,355	691,972	893,221	40,309	28,587	39,194
Property and equipment	14,189	9,982	9,060	530	412	398
Total assets	34,278,872	36,696,646	31,994,294	1,278,843	1,514,339	1,402,163
Liabilities:						
Securities lending liability	1,079,355	691,972	893,221	40,309	28,587	39,194
Investment accounts and other payables	596,954	936,139	623,001	22,159	38,515	27,330
Total liabilities	1,676,309	1,628,111	1,516,222	62,468	67,102	66,524
Net position restricted for pensions	\$ 32,602,563	35,068,535	30,478,072	1,216,375	1,447,237	1,335,639

(dollars in thousands)

	Utah Governors and Legislators Retirement Plan			Tier 2 Public Employees System		
	2022	2021	2020	2022	2021	2020
Assets:						
Cash and receivables	\$ 261	192	129	34,302	24,689	16,204
Investments at fair value	12,073	13,586	12,169	1,291,774	1,159,496	832,921
Invested securities lending collateral	396	265	354	42,388	22,634	24,215
Property and equipment	5	4	4	557	327	246
Total assets	12,735	14,047	12,656	1,369,021	1,207,146	873,586
Liabilities:						
Securities lending liability	396	265	354	42,388	22,634	24,215
Investment accounts and other payables	217	357	247	23,302	30,494	16,886
Total liabilities	613	622	601	65,690	53,128	41,101
Total position restricted for pensions	\$ 12,122	13,425	12,055	1,303,331	1,154,018	832,485

Deductions from the Firefighters System net position include retirement benefits and administrative expenses. For calendar year 2022, benefits amounted to \$71.0 million, an increase of \$4.7 million or 7.1% over calendar year 2021. The increase in benefit payments was due to an increased number of benefit recipients and cost of living benefit increases. For calendar year 2022, the costs of administering the system totaled \$451 thousand, an increase of \$16 thousand or 3.7% from calendar year 2021.

At December 31, 2022, the Firefighters Retirement System total pension liability was \$1.53 billion. The Plan's fiduciary net position was \$1.69 billion leaving a net pension asset of \$151.8 million. The Plan fiduciary net position as a percentage of the total pension liability was 109.9%.

Management Discussion and Analysis *(Continued)*

Public Safety System			Firefighters System			Judges System		
2022	2021	2020	2022	2021	2020	2022	2021	2020
41,882	77,098	52,186	14,009	26,379	17,371	2,570	4,528	3,081
4,812,020	5,162,616	4,459,424	1,701,409	1,820,450	1,565,220	264,393	284,916	245,966
157,901	100,777	129,647	55,830	35,536	45,505	8,676	5,562	7,151
2,075	1,453	1,315	734	512	462	114	80	73
5,013,878	5,341,944	4,642,572	1,771,982	1,882,877	1,628,558	275,753	295,086	256,271
157,901	100,777	129,647	55,830	35,536	45,505	8,676	5,562	7,151
86,802	135,774	90,408	30,909	47,878	31,859	4,770	7,494	4,987
244,703	236,551	220,055	86,739	83,414	77,364	13,446	13,056	12,138
4,769,175	5,105,393	4,422,517	1,685,243	1,799,463	1,551,194	262,307	282,030	244,133

Tier 2 Public Safety and Firefighter System			Total Defined Benefits Pension Plans			2022 Percent Change	2021 Percent Change
2022	2021	2020	2022	2021	2020		
5,230	3,706	2,424	400,051	703,715	473,934	(43.2)%	48.5%
222,080	183,707	120,263	42,425,284	45,537,680	39,308,008	(6.8)	15.8
7,287	3,586	3,496	1,392,142	888,919	1,142,783	56.6	(22.2)
96	52	35	18,300	12,822	11,593	—	10.6
234,693	191,051	126,218	44,235,777	47,143,136	40,936,318	(6.2)	15.2
7,287	3,586	3,496	1,392,142	888,919	1,142,783	56.6	(22.2)
4,005	4,831	2,438	769,118	1,201,482	797,156	(36.0)	50.7
11,292	8,417	5,934	2,161,260	2,090,401	1,939,939	3.4	7.8
223,401	182,634	120,284	42,074,517	45,052,735	38,996,379	(6.6)	15.5

Judges System

The Judges System provides retirement benefits to judges in the State of Utah who are eligible to participate in the system. Benefits of the system are funded by employer contributions and by earnings on investments. The system net position as of December 31, 2022, totaled \$262.3 million, a decrease of \$19.7 million or 7.0% from \$282.0 million as of December 31, 2021.

Additions to the Judges System net position consist of employer contributions, including court fees, investment income, and transfers. For calendar year 2022, contributions increased from \$10.3 million for calendar year 2020 to \$10.7 million, an increase of \$410 thousand or 4.0%. The system recognized a net investment loss of \$14.7 million for the calendar year 2022 compared with net investment gain of \$41.7 million for calendar year 2021. The investment loss for 2022 compared to the gain in 2021 was due to the negative rate of return realized in 2022.

Management Discussion and Analysis *(Continued)*

Statements of Changes in Fiduciary Net Position — Defined Benefit Pension Plans

Year Ended December 31

	<i>(dollars in thousands)</i>					
	Noncontributory System			Contributory System		
	2022	2021	2020	2022	2021	2020
Additions:						
Contributions	\$ 985,337	959,088	928,910	4,915	5,649	6,487
Investment income	(1,833,570)	5,201,752	3,430,989	(70,701)	220,023	154,367
Transfers from affiliated systems	58,592	5,986	—	—	—	4,542
Total additions	(789,641)	6,166,826	4,359,899	(65,786)	225,672	165,396
Deductions:						
Retirement benefits	1,662,640	1,565,046	1,488,627	94,365	91,712	89,890
Refunds	3,334	1,313	2,338	848	1,625	1,753
Administrative expenses	10,357	10,004	9,805	382	388	406
Transfers to affiliated systems	—	—	16,980	69,481	20,349	—
Total deductions	1,676,331	1,576,363	1,517,750	165,076	114,074	92,049
Increase (decrease) in net position restricted for pensions	\$ (2,465,972)	4,590,463	2,842,149	(230,862)	111,598	73,347
<i>(dollars in thousands)</i>						
	Utah Governors and Legislators Retirement Plan			Tier 2 Public Employees System		
	2022	2021	2020	2022	2021	2020
Additions:						
Contributions	\$ 422	361	369	217,343	168,289	138,466
Investment income	(693)	2,042	1,396	(65,084)	155,495	84,040
Transfers from affiliated systems	—	7	—	1	—	—
Total additions	(271)	2,410	1,765	152,260	323,784	222,506
Deductions:						
Retirement benefits	1,010	1,036	1,023	2,602	1,982	1,397
Refunds	—	—	10	—	—	—
Administrative expense	4	4	4	345	269	207
Transfers to affiliated systems	18	—	17	—	—	—
Total deductions	1,032	1,040	1,054	2,947	2,251	1,604
Increase (decrease) in net position restricted for pensions	\$ (1,303)	1,370	711	149,313	321,533	220,902

Deductions from the Judges System net position held in trust for benefits include retirement benefits and administrative expenses. For calendar year 2022, benefits amounted to \$17.6 million, a decrease of \$1.0 million or 5.3% over calendar year 2021. The decrease in benefit payments was due to a decrease in the number of new retirees compared to the prior year. For calendar year 2022, the costs of administering the system totaled \$88 thousand, an increase of \$3 thousand or 3.5% from calendar year 2021.

At December 31, 2022, the Judges System total pension liability was \$297.6 million. The Plan's fiduciary net position was \$262.3 million leaving a net pension liability of \$35.3 million. The Plan fiduciary net position as a percentage of the total pension liability was 88.1%.

Management Discussion and Analysis *(Continued)*

Public Safety System			Firefighters System			Judges System		
2022	2021	2020	2022	2021	2020	2022	2021	2020
169,572	153,945	151,069	48,480	47,620	46,498	10,713	10,303	10,056
(267,352)	756,145	496,725	(94,373)	265,931	173,818	(14,729)	41,716	27,391
5,403	7,956	7,364	3,513	2,983	2,751	1,990	4,563	2,340
(92,377)	918,046	655,158	(42,380)	316,534	223,067	(2,026)	56,582	39,787
241,776	233,672	215,289	71,019	66,508	62,842	17,609	18,600	15,863
552	32	96	370	176	159	—	—	—
1,513	1,466	1,442	451	435	425	88	85	84
—	—	—	—	1,146	—	—	—	—
243,841	235,170	216,827	71,840	68,265	63,426	17,697	18,685	15,947
\$ (336,218)	682,876	438,331	(114,220)	248,269	159,641	(19,723)	37,897	23,840

Tier 2 Public Safety and Firefighter System			Total Defined Benefits Pension Plans			2022 Percent Change	2021 Percent Change
2022	2021	2020	2022	2021	2020		
51,658	38,741	27,363	1,488,440	1,383,996	1,309,218	7.55%	5.71%
(10,791)	23,686	11,645	(2,357,293)	6,666,790	4,380,371	(135.4)	52.2
—	—	—	69,499	21,495	16,997	223.3	26.5
40,867	62,427	39,008	(799,354)	8,072,281	5,706,586	(109.9)	41.5
42	37	76	2,091,063	1,978,593	1,875,007	5.7	5.5
4	—	—	5,108	3,146	4,356	62.4	(27.8)
54	40	29	13,194	12,691	12,402	4.0	2.3
—	—	—	69,499	21,495	16,997	223.3	26.5
100	77	105	2,178,864	2,015,925	1,908,762	8.1	5.6
\$ 40,767	62,350	38,903	(2,978,218)	6,056,356	3,797,824	(149.2)%	59.5%

Utah Governors and Legislators Retirement Plan

The Governors and Legislators Plan provides retirement benefits to governors and legislators of the State of Utah. Benefits of the system are funded by employer contributions and by earnings on investments. The system net position as of December 31, 2022, totaled \$12.1 million, a decrease of \$1.3 million or 9.7% from \$13.4 million as of December 31, 2021.

Additions to the Governors and Legislators Retirement Plan net position include investment income and transfers. For calendar year 2022 employer contributions amounted to \$422.0 thousand as compared to \$361.0 thousand for 2021. The increase in the required contribution was due to unfavorable actuarial experience. The Plan recognized a net investment loss of \$0.7 million for calendar year 2022 compared with net investment gain of \$2.0 million for calendar year 2021. The investment loss for 2022 compared to the gain in 2021 was due to the negative rate of return realized in 2022.

Management Discussion and Analysis *(Continued)*

Deductions from the Governors and Legislators Retirement Plan net position include retirement benefits and administrative expenses. For calendar year 2022, retirement benefits amounted to \$1.0 million, a decrease of \$26 thousand or 2.5% from calendar year 2021. The decrease in benefit payments was due to decrease in the number of retirees collecting benefits in 2022. For calendar year 2022, the costs of administering the system totaled \$4 thousand.

At December 31, 2022, the Governors and Legislators Retirement Plan total pension liability was \$13.17 billion. The Plan's fiduciary net position was \$12.12 billion leaving a net pension asset of \$1.04 billion. The Plan fiduciary net position as a percentage of the total pension liability was 92.1%.

Tier 2 Public Employees System

The Tier 2 Public Employees System provides retirement benefits to eligible State of Utah, local governments, and public education employees who started employment July 1, 2011, or after. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2022, totaled \$1.30 billion, an increase of \$149.3 million or 12.9% from \$1.2 billion as of December 31, 2021.

Additions to the Tier 2 Public Employees System net position consist of employer contributions, investment income, and transfers. For calendar year 2022, member and employer contributions increased from \$168.3 million for calendar year 2021, to \$217.3 million, an increase of \$49.1 million or 29.1%. Contributions increased because total membership increased by nearly 14,000 members. The system recognized a net investment loss of \$65.1 million compared with a net investment gain of \$155.5 million in 2021. The investment loss for 2022 compared to the gain in 2021 was due to the system experiencing a negative rate of return in the current year.

Deductions from the Tier 2 Public Employees System net position for benefits include retirement benefits and administrative expenses. For calendar year 2022 the system paid \$2.6 million in retirement benefits and \$2.0 million in 2021, an increase of \$620 thousand or 31.3%. The costs of administering the system totaled \$345 thousand, an increase of \$76 thousand or 28.3% from calendar year 2021.

At December 31, 2022, the Tier 2 Public Employees Retirement System total pension liability was \$1.41 billion. The Plan's fiduciary net position was \$1.30 billion leaving a net pension liability of \$108.9 million. The Plan's fiduciary net position as a percentage of the total pension liability was 92.3%.

Tier 2 Public Safety and Firefighter System

The Tier 2 Public Safety and Firefighter System provides retirement benefits to eligible state and local government employees directly involved in law enforcement or fire fighting and are in a position of hazardous duty who started employment July 1, 2011, or after. Benefits of the system are funded by member and employer contributions and by earnings on investments. The system net position as of December 31, 2022, totaled \$223.4 million, an increase of \$40.8 million or 22.3% from \$182.6 million as of December 31, 2021.

Additions to the Tier 2 Public Safety and Firefighter System net position consist of employer contributions, investment income, and transfers. For calendar year 2022, member and employer contributions increased from \$38.7 million for calendar year 2021, to \$51.7 million in 2022, an increase of \$12.9 million or 33.3%. Contributions increased because total membership increased by over 670 members and average salary increases for active members of over 15%. The system recognized a net investment loss of \$10.8 million for calendar year 2022 compared with net investment gain of \$23.7 million for calendar year 2021. The investment loss for 2022 compared to the gain in 2021 was due to the system experiencing a negative rate of return in the current year.

Deductions from the Tier 2 Public Safety and Firefighter System net position include retirement benefits and administrative expenses. For calendar year 2022, benefits amounted to \$42 thousand, an increase of \$9 thousand or 24.3% over calendar year 2021. The cost of administering the system totaled \$54 thousand, an increase of \$14 thousand or 35.0% from calendar year 2021.

At December 31, 2022, the Tier 2 Public Safety and Firefighter Retirement System total pension liability was \$231.7 million. The Plan's fiduciary net position was \$223.4 million leaving a net pension liability of \$8.3 million. The Plan's fiduciary net position as a percentage of the total pension liability was 96.4%.

Management Discussion and Analysis *(Continued)*

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate

System	(in thousands)	1% Decrease (5.85%)	Current Discount Rate (6.85%)	1% Increase (7.85%)
Noncontributory Retirement System	\$	6,742,745	2,328,799	(1,363,844)
Contributory Retirement System		134,674	22,430	(73,670)
Public Safety Retirement System		1,049,307	346,265	(228,353)
Firefighters Retirement System		59,814	(151,839)	(325,193)
Judges Retirement System		68,698	35,268	6,909
Utah Governors and Legislative Retirement Plan		2,265	1,044	(1)
Tier 2 Public Employees Contributory Retirement System		475,787	108,889	(173,759)
Tier 2 Public Safety and Firefighter Contributory Retirement System		66,779	8,342	(38,101)
Total	\$	8,600,069	2,699,198	(2,196,012)

Some URS stakeholders may also be interested in the measure of the net pension liability if the liability was calculated using an interest rate based on the current yields of high-quality fixed income investments. For instance, the NPL at a 3.50% discount rate is \$25.1 billion as of December 31, 2022. This amount consists of a \$67.2 billion Total Pension Liability less the \$42.1 billion Fiduciary Net Position. Note, although the disclosure of a net pension liability using a 3.50% discount rate may be useful for comparison purposes, it is not an appropriate basis for developing contribution requirements for participating employers in the retirement system.

Actuarial Valuations and Funding Progress

Actuarial valuation of each defined benefit system is performed annually. As of January 1, 2022, the date of the most recent actuarial valuation, the average funded ratio of the Systems using the actuarial value of assets was 95.6%. This was increased from the Systems' January 1, 2021 valuation average funded ratio of 93.2%. The funded ratio increased due to the investment gains realized in calendar year 2021, 2020, 2019 that were above the discount rate of 6.85%. Absent of unfavorable actuarial experience, the Systems funded ratio will gradually increase in future years.

In determining contribution rates an actuarial value of assets is used rather than a fair value of assets. The actuarial value of assets is based on a smoothed expected income investment rate. Investment income in excess or shortfall of the expected rate on fair value is smoothed over a 5-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.

As of January 1, 2022, the Systems' underfunded actuarial accrued liability was \$1.98 billion. This was a net decrease in the unfunded position of \$4.74 billion compared to January 1, 2021. As of January 1, 2022, the

difference between the actuarial value of assets and fair value of assets was \$714.21 thousand in actuarially deferred losses. These actuarially deferred losses will be recognized by the actuary over the next four years.

Every three years in conjunction with the actuarial valuation, the actuary performs an experience study. The most recent experience study was from December 31, 2020. Given the impact COVID-19 had on the investment markets, forward-looking expectations on the investment universe had changed from month to month during 2020 therefore the URS board delayed the investment return assumption to 2021. In 2021, the URS board adopted a 6.85% investment return assumption for the use in the 2021 actuarial valuation and also adopted an inflation assumption of 2.40%. The next experience study occurs as of December 31, 2023.

In accordance with GASB Statement 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the table on page 47 presents the net pension liability/(asset) of the participating employers calculated using the discount rate of 6.85%, as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1.00% lower -5.85% or 1.00% higher -7.85% than the current rate.

Management Discussion and Analysis *(Continued)*



Analysis of the Defined Contribution Savings Plans

401(k) Defined Contribution Plan

The 401(k) Plan was established under section 401(k) of the Internal Revenue Code. This plan provides supplemental and primary retirement benefits for plan participants. The plan is funded by contributions and investment earnings. The plan net position as of December 31, 2022, amounted to \$6.6 billion, a decrease of \$1.10 billion or 14.4% over net position as of December 31, 2021. The plan recognized a net investment loss of \$1.12 million for calendar year 2022 compared with a net investment gain of \$992.4 million for the calendar year 2021.

Additions to the 401(k) Plan net position include contributions and investment income. For calendar year 2022, contributions decreased from those of calendar year 2021 from \$440.4 million to \$418.8 million or a decrease of \$21.6 million or 4.9%. Contributions decreased because of decreased participation and less rollovers into the plan.

Deductions from the 401(k) Plan net position include participant and beneficiary refunds (including rollovers) and administrative expenses. For calendar year 2022, refunds amounted to \$398.4 million, a decrease of \$8.5 million or 2.1% over calendar year 2021. The decrease in refunds was due to a decrease in withdrawals for calendar year 2022. For calendar year 2022, the costs of administering the plan amounted to \$7.8 million, an increase of \$650 thousand or 9.0% over calendar year 2021.

Benefit obligations of the 401(k) Defined Contribution Plan are equal to the member account balances, which are equal to net position of the plan.

457(b) Defined Contribution Plan

The 457(b) Plan was established under Section 457(b) of the Internal Revenue Code. This plan provides supplemental retirement benefits for plan participants. The plan is funded by contributions and by investment earnings. The plan net position as of December 31, 2022, totaled \$731.3 million, a decrease of \$128.5 million or 14.9% over net position as of December 31, 2021.

Additions to the 457(b) Plan net position include contributions and investment income. For calendar year 2022, contributions increased from those of calendar year 2021 from \$41.4 million to \$44.5 million or an increase of \$3.1 million or 7.6%. Contributions increased because of increased participation. The plan recognized a net investment loss of \$128.8 million for calendar year 2022 compared with a net investment gain of \$109.9 million for the calendar year 2021.

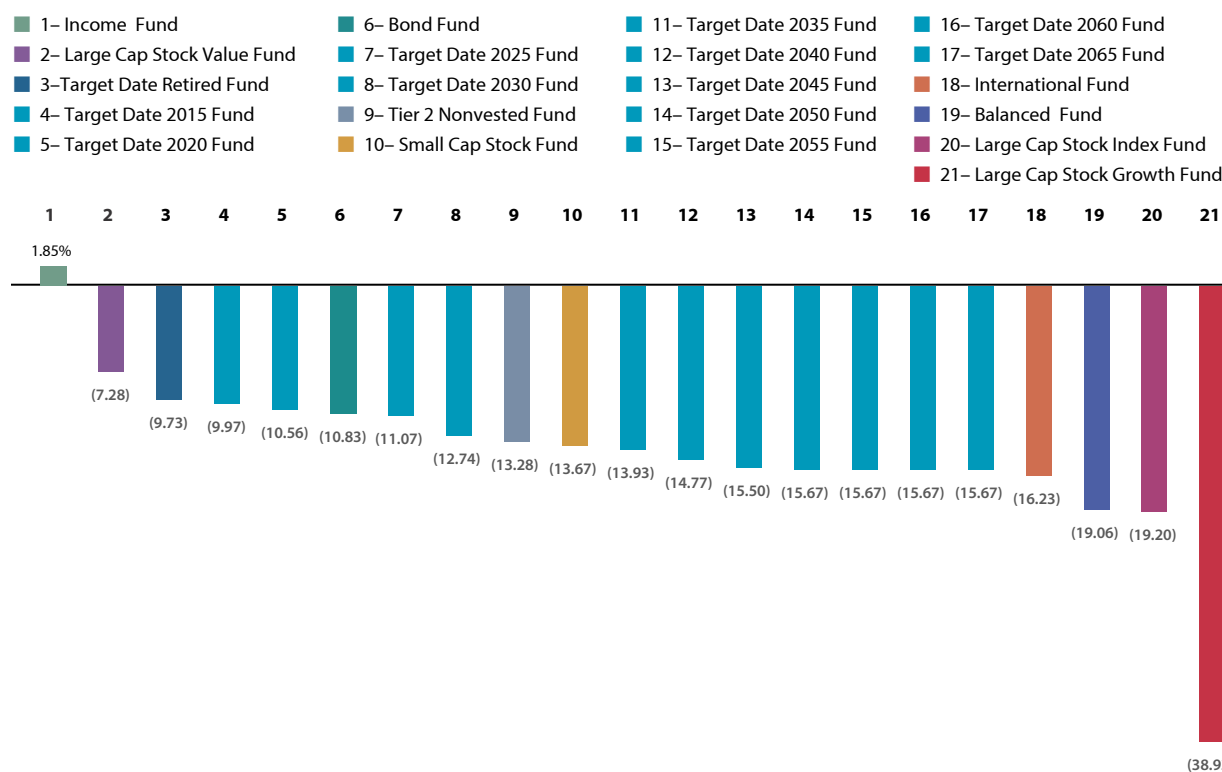
Deductions from the 457(b) Plan net position include participant and beneficiary refunds (including rollovers) and administrative expenses. For calendar year 2022, refunds amounted to \$43.4 million, an increase of \$1.5 million or 3.5% over calendar year 2021. The increase in refunds was due to an increase in participant withdrawals for calendar year 2022. For calendar year 2022, the cost of administering the plan amounted to \$847 thousand, an increase of \$59 thousand or 7.5% over calendar year 2021.

Benefit obligations of the 457(b) Defined Contribution Plan are equal to the member account balances, which are equal to net position of the plan.

Management Discussion and Analysis *(Continued)*

Defined Contribution Savings Plans Investment Option Rates of Return for 2022

(in percents)



Roth IRA Plan

The Roth IRA is a “deemed IRA” authorized by section 408(q) of the Internal Revenue Code, and governed by section 408A of the code. This plan allows participants to make after-tax contributions, while the earnings may be withdrawn tax free (for qualified distributions). The plan net position as of December 31, 2022, totaled \$288.7 million, a decrease of \$15.9 million or 5.3% over net position as of December 31, 2021.

Additions to the Roth IRA Plan include contributions, transfers from other Roth IRAs, conversions from traditional IRAs, rollovers from other retirement plans, and investment earnings. For calendar year 2022, contributions increased from those of calendar year 2021 from \$40.3 million to \$44.6 million or 10.8%. Contributions increased because of increased participation. The plan recognized a net investment loss of \$48.5 million for calendar year 2022 compared with a net investment gain of \$39.8 million for calendar year 2021.

Defined Contribution Comparative Annualized Rates of Return

Year Ended December 31

Investment Option Comparative Index	2022	2021
Income Fund	1.85%	1.60%
Bond Fund	(10.83)	(0.96)
Balanced Fund	(19.06)	14.88
Large Cap Stock Value Fund	(7.28)	31.64
Large Cap Stock Index Fund	(19.20)	26.23
Large Cap Stock Growth Fund	(38.93)	19.24
International Fund	(16.23)	8.32
Small Cap Stock Fund	(13.67)	30.41
Target Retired	(9.73)	7.43
Target Date 2015 Fund	(9.97)	8.69
Target Date 2020 Fund	(10.56)	9.85
Target Date 2025 Fund	(11.07)	12.37
Target Date 2030 Fund	(12.74)	14.57
Target Date 2035 Fund	(13.93)	15.98
Target Date 2040 Fund	(14.77)	17.32
Target Date 2045 Fund	(15.50)	18.31
Target Date 2050 Fund	(15.67)	18.69
Target Date 2055 Fund	(15.67)	18.69
Target Date 2060 Fund	(15.67)	18.69
Target Date 2065 Fund	(15.67)	18.69
Tier 2 Nonvested	(13.28)	14.47

Management Discussion and Analysis *(Continued)*

Statements of Fiduciary Net Position — Defined Contribution Savings Plans

December 31

(dollars in thousands)

	401(k) Plan			457(b) Plan		
	2022	2021	2020	2022	2021	2020
Assets:						
Cash and receivables	\$ 104,627	98,980	183,507	10,008	9,957	18,831
Investments at fair value	6,475,885	7,580,971	6,560,033	721,972	850,550	741,216
Total assets	6,580,512	7,679,951	6,743,540	731,980	860,507	760,047
Liabilities:						
Investment accounts and other payables	26,233	21,979	104,391	673	667	8,827
Total liabilities	26,233	21,979	104,391	673	667	8,827
Net position restricted for pensions	\$ 6,554,279	7,657,972	6,639,149	731,307	859,840	751,220

Statements of Changes in Fiduciary Net Position — Defined Contribution Savings Plans

Year Ended December 31

(dollars in thousands)

	401(k) Plan			457(b) Plan		
	2022	2021	2020	2022	2021	2020
Additions:						
Contributions	\$ 418,787	440,435	358,220	\$ 44,496	41,365	36,554
Investment income	(1,116,266)	992,415	870,766	(128,799)	109,947	101,250
Total additions	(697,479)	1,432,850	1,228,986	(84,303)	151,312	137,804
Deductions:						
Refunds	398,377	406,840	305,565	43,383	41,904	31,259
Administrative expenses	7,837	7,187	7,112	847	788	778
Total deductions	406,214	414,027	312,677	44,230	42,692	32,037
Increase (decrease) in net position restricted for pensions	\$ (1,103,693)	1,018,823	916,309	(128,533)	108,620	105,767

Deductions from the Roth IRA Plan net position include participant and beneficiary refunds, transfers and rollovers, and administrative expenses. For calendar year 2022, refunds amounted to \$11.7 million, a decrease of \$2.3 million or 16.3% over calendar year 2021. For calendar year 2022, the cost of administering the plan amounted to \$322 thousand, an increase of \$55 thousand or 20.6% over calendar year 2021.

Traditional IRA Plan

The Traditional IRA is a “deemed IRA” authorized by section 408(q) of the Internal Revenue Code, and governed by section 408 of the code. This plan allows participants to make after-tax contributions and possibly

deduct all or a portion of the contributions from their current taxable income. This plan also allows participants to consolidate many other eligible plan assets when they become eligible for roll over (such as 401(k), 457(b), and other IRAs). Participants may also convert Traditional IRA funds into a Roth IRA. The plan net position as of December 31, 2022, totaled \$201.1 million, a decrease of \$20.9 million or 9.4% over net position as of December 31, 2021.

Additions to the Traditional IRA Plan include contributions, rollovers, and investment earnings. For calendar year 2022, contributions decreased from those of calendar year 2021 from \$30.2 million to \$24.2 million or 19.9%. The plan recognized a net investment loss

Management's Discussion and Analysis *(Concluded)*

Roth IRA Plan			Traditional IRA Plan			Total Defined Contribution Plans			2022	2021
2022	2021	2020	2022	2021	2020	2022	2021	2020	Percent Change	Percent Change
570	360	2,418	20	106	13,111	115,225	109,403	217,867	5.3%	(49.8)%
288,453	304,678	238,829	201,094	221,965	188,875	7,687,404	8,958,164	7,728,953	(14.2)	15.9
289,023	305,038	241,247	201,114	222,071	201,986	7,802,629	9,067,567	7,946,820	(14.0)	14.1
369	459	2,449	74	177	13,169	27,349	23,282	128,836	17.5	(81.9)
369	459	2,449	74	177	13,169	27,349	23,282	128,836	17.5	(81.9)
288,654	304,579	238,798	201,040	221,894	188,817	7,775,280	9,044,285	7,817,984	(14.0)%	15.7%

Roth IRA Plan			Traditional IRA Plan			Total Defined Contribution Plans			2022	2021
2022	2021	2020	2022	2021	2020	2022	2021	2020	Percent Change	Percent Change
44,618	40,284	34,833	24,174	30,196	16,598	532,075	552,280	446,205	(3.7)%	23.8%
(48,495)	39,770	32,668	(28,687)	22,345	21,450	(1,322,247)	1,164,477	1,026,134	(213.5)	13.5
(3,877)	80,054	67,501	(4,513)	52,541	38,048	(790,172)	1,716,757	1,472,339	(146.0)	16.6
11,726	14,006	8,803	16,113	19,271	13,424	469,599	482,021	359,051	(2.6)	34.2
322	267	238	228	193	234	9,234	8,435	8,362	9.5	0.9
12,048	14,273	9,041	16,341	19,464	13,658	478,833	490,456	367,413	(2.4)	33.5
(15,925)	65,781	58,460	(20,854)	33,077	24,390	(1,269,005)	1,226,301	1,104,926	(203.5)%	11.0%

of \$28.7 million for calendar year 2022 compared with a net investment gain of \$22.3 million for calendar year 2021.

Deductions from the Traditional IRA Plan net position include participant and beneficiary refunds, rollovers and transfers, and administrative expenses. For calendar year 2022, refunds amounted to \$16.1 million, a decrease of \$3.2 million or 16.4% over calendar year 2021 due to lower participant withdrawals. For calendar year 2022, the costs of administering the plan amounted to \$228 thousand, an increase of \$35 thousand or 18.1% over calendar year 2021.

GASB 68 Employer Allocations and Pension Reporting

URS has included information regarding employer's proportionate share of the net pension liability, deferred outflows of resources, deferred inflows of resources, and pension expense. This section is where employers and auditors are able to get information regarding their pension disclosures for financial statement purposes.

Utah Retirement Systems

Basic Financial Statements

Statements of Fiduciary Net Position — Pension (and Other Employee Benefit) Trust Fund

December 31, 2022

with Comparative Totals for December 31, 2021

(in thousands)

	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Utah Governors and Legislators Retirement Plan
Assets:						
Cash	\$ 3,516	3	20	2	1	1
Receivables:						
Member contributions	—	48	9	645	—	—
Employer contributions	36,503	127	4,960	213	383	167
Court fees and fire insurance tax	—	—	—	105	159	—
Investments	252,182	9,418	36,893	13,044	2,027	93
Total receivables	288,685	9,593	41,862	14,007	2,569	260
Investments at fair value:						
Short-term securities	946,578	35,350	138,478	48,962	7,609	347
Debt securities	5,008,270	187,036	732,673	259,054	40,256	1,838
Equity investments	10,133,950	378,457	1,482,521	524,182	81,456	3,720
Absolute return	5,838,782	218,052	854,171	302,014	46,932	2,143
Private equity	4,287,226	160,108	627,189	221,758	34,460	1,574
Real assets	6,678,321	249,405	976,988	345,439	53,680	2,451
Total Investments	32,893,127	1,228,408	4,812,020	1,701,409	264,393	12,073
Invested securities lending collateral	1,079,355	40,309	157,901	55,830	8,676	396
Property and equipment, at cost, net of accumulated depreciation	14,189	530	2,075	734	114	5
Total assets	34,278,872	1,278,843	5,013,878	1,771,982	275,753	12,735
Liabilities:						
Securities lending liability	1,079,355	40,309	157,901	55,830	8,676	396
Disbursements in excess of cash balance	41,912	1,565	6,131	2,168	337	15
Compensated absences, post employment benefits and insurance reserve	18,849	704	2,758	975	152	7
Investment accounts payable	458,660	16,994	66,570	23,756	3,658	167
Real estate liabilities	77,533	2,896	11,343	4,010	623	28
Total liabilities	1,676,309	62,468	244,703	86,739	13,446	613
Net position restricted for pensions	\$ 32,602,563	1,216,375	4,769,175	1,685,243	262,307	12,122

The accompanying notes are an integral part of the financial statements.

Utah Retirement Systems

Defined Benefit Pension Plans			Defined Contribution Plans					Total Pension Trust Funds		
Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System	Total Defined Benefits Pension Plans	Additional Combining Information					Total Defined Contribution Plans	2022	2021
			401(k) Plan	457(b) Plan	Roth IRA Plan	Traditional IRA Plan				
3	2	3,548	25,050	510	570	20	26,150	29,698	24,512	
—	309	1,011	—	—	—	—	—	1,011	685	
24,395	3,216	69,964	—	—	—	—	—	69,964	58,365	
—	—	264	—	—	—	—	—	264	270	
9,904	1,703	325,264	79,577	9,535	—	—	88,692	414,339	729,286	
34,299	5,228	396,503	79,577	9,535	—	—	88,692	485,578	788,606	
37,174	6,391	1,220,889	—	—	—	—	—	1,220,889	3,370,782	
196,684	33,814	6,459,625	2,093,854	218,320	75,382	100,945	2,488,501	8,948,126	8,008,797	
397,979	68,420	13,070,685	4,147,356	480,651	200,301	94,642	4,922,950	17,993,635	22,993,328	
229,300	39,421	7,530,815	—	—	—	—	—	7,530,815	6,875,009	
168,367	28,945	5,529,627	—	—	—	—	—	5,529,627	5,973,612	
262,270	45,089	8,613,643	234,675	23,001	12,770	5,507	275,953	8,889,596	7,274,316	
1,291,774	222,080	42,425,284	6,475,885	721,972	288,453	201,094	7,687,404	50,112,688	54,495,844	
42,388	7,287	1,392,142	—	—	—	—	—	1,392,142	888,919	
557	96	18,300	—	—	—	—	—	18,300	12,822	
1,369,021	234,693	44,235,777	6,580,512	731,980	289,023	201,114	7,802,629	52,038,406	56,210,703	
42,388	7,287	1,392,142	—	—	—	—	—	1,392,142	888,919	
1,646	283	54,057	686	27	24	5	742	54,799	36,048	
740	127	24,312	—	—	—	—	—	24,312	26,976	
17,871	3,072	590,748	25,547	646	345	69	26,607	617,355	1,061,740	
3,045	523	100,001	—	—	—	—	—	100,001	100,000	
65,690	11,292	2,161,260	26,233	673	369	74	27,349	2,188,609	2,113,683	
1,303,331	223,401	42,074,517	6,554,279	731,307	288,654	201,040	7,775,280	49,849,797	54,097,020	

Utah Retirement Systems
Basic Financial Statements (Concluded)

Statements of Changes in Fiduciary Net Position — Pension (and Other Employee Benefit) Trust Funds

Year Ended December 31, 2022

with Comparative Totals for Year Ended December 31, 2021

(in thousands)

	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Utah Governors and Legislators Retirement Plan
Additions:						
Contributions:						
Member	\$ 15,415	1,240	1,037	19,269	—	—
Employer	969,922	3,675	168,535	6,473	9,378	422
Court fees and fire insurance tax	—	—	—	22,738	1,335	—
Total contributions	985,337	4,915	169,572	48,480	10,713	422
Investment income:						
Net appreciation (depreciation) in fair value of investments	(2,397,887)	(92,459)	(349,636)	(123,420)	(19,262)	(907)
Interest, dividends and other investment income	663,003	25,564	96,673	34,125	5,326	251
Total income (loss) from investment activity	(1,734,884)	(66,895)	(252,963)	(89,295)	(13,936)	(656)
Less investment expenses	102,596	3,956	14,960	5,280	824	39
Net income (loss) from investment activity	(1,837,480)	(70,851)	(267,923)	(94,575)	(14,760)	(695)
Income from security lending activity	4,250	164	620	219	34	2
Less security lending expense	340	14	49	17	3	—
Net income from security lending activity	3,910	150	571	202	31	2
Net investment income (loss)	(1,833,570)	(70,701)	(267,352)	(94,373)	(14,729)	(693)
Transfers from affiliated systems	58,592	—	5,403	3,513	1,990	—
Total additions	(789,641)	(65,786)	(92,377)	(42,380)	(2,026)	(271)
Deductions:						
Retirement benefits	1,403,260	79,560	201,672	57,540	14,606	847
Cost-of-living benefits	259,380	14,791	39,965	13,355	3,003	163
Supplemental retirement benefits	—	14	139	124	—	—
Refunds	3,334	848	552	370	—	—
Administrative expenses	10,357	382	1,513	451	88	4
Transfers to affiliated systems	—	69,481	—	—	—	18
Total deductions	1,676,331	165,076	243,841	71,840	17,697	1,032
Increase (decrease) from operations	(2,465,972)	(230,862)	(336,218)	(114,220)	(19,723)	(1,303)
Net position restricted for pensions beginning of year	35,068,535	1,447,237	5,105,393	1,799,463	282,030	13,425
Net position restricted for pensions end of year	\$ 32,602,563	1,216,375	4,769,175	1,685,243	262,307	12,122

The accompanying notes are an integral part of the financial statements.

Utah Retirement Systems

Tier 2 Public Employees System	Defined Benefit Pension Plans		Defined Contribution Plans					Total Pension Trust Funds		
	Tier 2 Public Safety and Firefighter System	Total Defined Benefits Pension Plans	Additional Combining Information					Total Defined Contribution Plans	2022	2021
			401(k) Plan	457(b) Plan	Roth IRA Plan	Traditional IRA Plan				
164	7,386	44,511	418,787	44,496	44,618	24,174	532,075	576,586	595,701	
217,179	44,272	1,419,856	—	—	—	—	—	1,419,856	1,318,085	
—	—	24,073	—	—	—	—	—	24,073	22,490	
217,343	51,658	1,488,440	418,787	44,496	44,618	24,174	532,075	2,020,515	1,936,276	
(85,244)	(14,122)	(3,082,937)	(1,116,991)	(128,925)	(48,368)	(28,581)	(1,322,865)	(4,405,802)	7,151,498	
23,685	3,914	852,541	3,661	442	—	—	4,103	856,644	767,631	
(61,559)	(10,208)	(2,230,396)	(1,113,330)	(128,483)	(48,368)	(28,581)	(1,318,762)	(3,549,158)	7,919,129	
3,665	606	131,926	2,936	316	127	106	3,485	135,411	95,560	
(65,224)	(10,814)	(2,362,322)	(1,116,266)	(128,799)	(48,495)	(28,687)	(1,322,247)	(3,684,569)	7,823,569	
152	25	5,466	—	—	—	—	—	5,466	8,511	
12	2	437	—	—	—	—	—	437	813	
140	23	5,029	—	—	—	—	—	5,029	7,698	
(65,084)	(10,791)	(2,357,293)	(1,116,266)	(128,799)	(48,495)	(28,687)	(1,322,247)	(3,679,540)	7,831,267	
1	—	69,499	—	—	—	—	—	69,499	21,495	
152,260	40,867	(799,354)	(697,479)	(84,303)	(3,877)	(4,513)	(790,172)	(1,589,526)	9,789,038	
2,573	41	1,760,099	—	—	—	—	—	1,760,099	1,674,591	
29	1	330,687	—	—	—	—	—	330,687	303,699	
—	—	277	—	—	—	—	—	277	303	
—	4	5,108	398,377	43,383	11,726	16,113	469,599	474,707	485,167	
345	54	13,194	7,837	847	322	228	9,234	22,428	21,126	
—	—	69,499	—	—	—	—	—	69,499	21,495	
2,947	100	2,178,864	406,214	44,230	12,048	16,341	478,833	2,657,697	2,506,381	
149,313	40,767	(2,978,218)	(1,103,693)	(128,533)	(15,925)	(20,854)	(1,269,005)	(4,247,223)	7,282,657	
1,154,018	182,634	45,052,735	7,657,972	859,840	304,579	221,894	9,044,285	54,097,020	46,814,363	
1,303,331	223,401	42,074,517	6,554,279	731,307	288,654	201,040	7,775,280	49,849,797	54,097,020	

Notes to Basic Financial Statements

December 31, 2022



Note 1 Description of Systems and Plans

A brief description of the Utah Retirement Systems (Systems), 401(k), 457(b), Roth and Traditional IRAs (Plans) follows. For a more complete description of plan provisions, membership and benefit statistics, see the Systems Highlights on pages 14 through 30 and Summaries of Plan Provisions on pages 212 through 229.

A) General Information and Reporting Entity

General — The Utah Retirement Systems are comprised of the following pension trust funds:

- i) the **Public Employees Noncontributory Retirement System** (Noncontributory System); the **Public Employees Contributory Retirement System** (Contributory System); and the **Firefighters Retirement System** are multiple-employer, cost-sharing, public employee retirement systems;

- ii) the **Public Safety Retirement System** is a mixed agent and cost-sharing, multiple- employer retirement system;
- iii) the **Judges Retirement System** and the **Utah Governors and Legislators Retirement Plan** are single-employer service-employee retirement systems;
- iv) the **Tier 2 Public Employees Contributory Retirement System** and the **Tier 2 Public Safety and Firefighter Contributory Retirement System** are multiple-employer, cost-sharing public employee retirement systems; and
- v) four defined contribution plans comprised of the **401(k) Plan, 457(b) Plan, and Roth and Traditional IRAs.**

These Systems and Plans cover employees of the State of Utah and participating local government and public education entities.

Reporting Entity — These basic financial statements cover all of the foregoing retirement systems and defined contribution plans administered by the Utah State Retirement Board (Board), the sole governing body for these Systems and Plans.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Summary of Benefits by System

	Noncontributory System	Contributory System	Public Safety System	Fire-fighters System	Judges System	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System
Final average salary is	Highest 3 years	Highest 5 years	Highest 3 years	Highest 3 years	Highest 2 years	Highest 5 years	Highest 5 years
Years of service required and/ or age eligible for benefit	30 years any age 25 years any age* 20 years age 60* 10 years age 62* 4 years age 65	30 years any age 20 years age 60* 10 years age 62* 4 years age 65	20 years any age 10 years age 60 4 years age 65	25 years any age 20 years age 55* 10 years age 62 6 years age 70	35 years any age 20 years age 60* 10 years age 62* 4 years age 65	25 years any age 20 years age 60* 10 years age 62*	
Benefit percent per year of service**	2.0% per year all years	1.25% per year to June 1975; 2.0% per year July 1975 to present	2.5% per year up to 20 years; 2.0% per year over 20 years	5.0% first 10 years; 2.25% second 10 years; 1.0% over 20 years	1.5% per year all years	1.5% per year to June 2020; 2.0% per year July 2020 to present	

Note: The Utah Governors and Legislators Retirement Plan benefits are explained in the second paragraph of section B) below.

*With actuarial reductions.

**For members and retirees in the systems, prior to January 1, 1989, there may be a 3% benefit enhancement.

The Systems are established and governed by the respective sections of Title 49 of the Utah Code Annotated 1953, as amended. The Systems' defined benefit plans are amended statutorily by the State Legislature. The Utah State Retirement Office Act in Title 49 provides for the administration of the Systems and Plans under the direction of the Board, whose members are appointed by the Governor. The Plans are established under the authority of the same sections of the Utah Code Annotated 1953, as amended, as well as under Sections 401(k), 457(b), 408, and 408A of the Internal Revenue Code. The Plans may be amended by the Board within the parameters of the Internal Revenue Code. The Systems and Plans are fiduciary funds defined as pension (and other employee benefit) trust funds. Utah Retirement Systems is a component unit of the State of Utah.

B) Retirement and Death Benefits

The Systems' benefits are specified by the statute listed in Note 1(A). The Systems are defined benefit plans wherein benefits are based on age and/ or years of service and highest average salary. Various plan options within the Systems may be selected by retiring members. Some options require actuarial reductions based on attained age, age of spouse, and similar actuarial factors. A brief summary of eligibility and benefits of the various Systems is shown in the table above.

The Utah Governors and Legislators Retirement Plan provides the following benefits. Former governors at age 65 receive \$1,480 per month per term. Legislators receive a benefit at age 65 with four or more years of service at the rate of \$32.00 per month per year of service. Retirement at age 62 with 10 or more years of service will receive an actuarial reduction. Both the governors' and legislators' benefits are adjusted based on the CPI limited to 4% of the base benefit per year.

Death benefits for active and retired employees are in accordance with retirement statutes. Upon termination of employment, members of the Systems may leave their retirement account intact for future benefits based on vesting qualification or withdraw the accumulated funds in their individual member account and forfeit service credits and rights to future benefits upon which the contributions were based.

C) Defined Contribution Plans

The 401(k), 457(b), and Roth and Traditional IRAs administered by the Board are defined contribution plans. These Plans are available as supplemental plans to the basic retirement benefits of the Retirement Systems and as a primary retirement plan for some Tier 2 participants. Contributions may be made into the Plans subject to plan and Internal Revenue Code limitations by employees of employers sponsoring the Plans. Employer contributions may be made into the 401(k) and 457(b) Plans at rates determined by the employers and according to Utah Title 49.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

Defined Contribution Plans

	401(k)	457(b)	Roth IRA	Traditional IRA
Number of participating employers	487	303	N/A	N/A
Total participants	204,417	20,444	18,877	3,268

There are 487 employers participating in the 401(k) Plan and 303 employers participating in the 457(b) Plan. There are 204,417 plan participants in the 401(k) Plan, 20,444 participants in the 457(b) Plan, 18,877 participants in the Roth IRA, and 3,268 participants in the Traditional IRA.

After termination of employment, benefits are paid out to individuals in lump sum, or as periodic benefit payments, at the option of the participant based on individual account balances and plan provisions. The Defined Contribution Plans account balances are fully vested to the participants at the time of deposit except for Tier 2 required employer contributions and associated earnings during the first four years of employment.

Investments in the vested portion of the Defined Contribution Plans are individually directed and controlled by plan participants who direct the investment of their funds among several investment options of varying degrees of risk and earnings potential. Participants may transfer their funds between these options no more frequently than every seven days. There is also a 2% trading fee for investment transfers between core fund options more frequently than every 30 days. Investments of the Plans are reported at fair value.

D) Contributions

As a condition of participation in the Defined Benefit Systems, employers and/ or employees are required to contribute certain percentages of salaries and wages as authorized by statute and specified by the Board. Employee contributions may be paid in part or in whole by the employer. Contributions in some Systems are also augmented by fees or insurance premium taxes. Contribution rates are listed in Note 6.

Employee (member) contributions are placed into member accounts, and in Systems where it is authorized, interest is credited to member accounts. Upon termination of employment, a member may withdraw his or her account balance including interest that has been credited. Upon withdrawal a member forfeits the service credit that corresponds to the member contributions withdrawn.

The noncontributory retirement systems have no required member contributions flowing into them. However, where members had a balance transferred in or purchased service credit in the system, these balances and on-going interest, where authorized, are credited to individual member accounts that may be withdrawn upon the termination of employment.

In the 401(k) and 457(b) Defined Contribution Plans, voluntary deferral of compensation within the limits of plan provisions may be made by employees. In addition to employee voluntary deferrals, employer contributions may be made into the Plans on behalf of employees. The recognition of deferred compensation, employer contributions, and earnings on the accounts are deferred for income tax purposes until actually paid to the participant beneficiary. The employee may also contribute to the Roth and Traditional deemed IRAs where earnings may grow tax deferred and possibly tax free.

E) Covered Employees

The **Public Employees Noncontributory Retirement System** (Noncontributory System) was established on July 1, 1986, and is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. All eligible employees of the State and School entities hired subsequent to that date are automatically members of the Noncontributory System until July 1, 2011, when Tier 2 came into effect. Local government entities had the option of adopting the new System or remaining with the Contributory System.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Participating Membership by System

	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Utah Governors and Legislators Retirement Plan	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighters System
Number of participating:								
Employers	482	159	135	72	1	1	493	155
Members:								
Active	45,437	253	3,918	1,289	119	44	43,105	5,326
Terminated vested	47,415	908	4,673	467	10	70	7,173	530
Retirees and beneficiaries:								
Services benefits	59,343	3,007	6,255	1,392	135	173	445	5
Beneficiary benefits	5,923	487	891	259	29	64	12	2

All Contributory System members whose employers adopted the Noncontributory System were given the opportunity to transfer to the new System during limited window periods. All eligible new hires subsequent to adoption of the noncontributory plans are automatically members of that plan.

The **Public Employees Contributory Retirement System** (Contributory System) includes eligible public employees of the State of Utah and its political subdivisions including public education employees of those entities covered by the System. The System is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. Members of this System are those who did not elect to transfer to the Public Employees Noncontributory Retirement System during the period when they were eligible to transfer or whose employers are not participants in the Noncontributory System.

The **Public Safety Retirement System** includes eligible State and local government employees directly involved in law enforcement (e.g., game wardens, prison guards, police officers, and highway patrol officers) and is comprised of eight divisions, the State of Utah, Division A with Social Security, Salt Lake City, Ogden, Provo, Logan, Bountiful, and Division B without Social Security. These divisions are not separate plans. The Public Safety System consists of both contributory and noncontributory divisions. The noncontributory divisions were authorized by the Legislature effective July 1, 1989.

The **Firefighters Retirement System** includes eligible State and local government employees directly involved in fire fighting and is comprised of two divisions, Division A with Social Security and Division B without Social Security. These divisions are not separate plans.

The **Judges Retirement System** includes justices and judges of the court as authorized by state statutes.

The **Utah Governors and Legislators Retirement Plan** includes only governors and legislators of the State.

The **Tier 2 Public Employees Contributory Retirement System** includes eligible public employees entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

The **Tier 2 Public Safety and Firefighter Contributory Retirement System** includes eligible public safety and firefighters entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

The **Defined Contribution Plans** may be utilized by employers adopting the Plans and by their employees.

As of December 31, 2022, participating members by System are included in the table above.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



Note 2 Summary of Significant Accounting Policies

The following are the significant accounting policies followed by the Systems and Plans:

A) Method of Accounting

The Systems and Plans maintain records and accounts, and prepare financial statements using fund accounting principles and the accrual basis of accounting, under which benefits and expenses are recognized when due and payable and revenues are recorded in the accounting period in which they are earned and become measurable in accordance with the terms of each System and Plan.

For financial reporting purposes, Utah Retirement Systems adheres to accounting principles generally accepted in the United States of America (GAAP). The Systems and Plans apply all applicable pronouncements of the Governmental Accounting Standards Board (GASB).

GASB Statement No. 67, *Financial Reporting for Pensions*, addresses accounting and financial reporting requirements for pension plans. Significant requirements include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The total pension liability, determined in accordance with GASB Statement No. 67, is presented in Note 5 and in the Required Supplementary Information on page 90.

GASB Statement No. 72, *Fair Value Measurement and Application*, addresses accounting and reporting issues related to fair value measurements. This Statement requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques. Comprehensive footnote disclosure regarding this Statement is found in Note 3 beginning on page 62.

The financial statements include certain prior year summarized comparative information in total, but not by system or plan. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the Systems' financial statements for the year ended December 31, 2021, from which the summarized information was derived.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

B) Investments

By state statute all of the investment assets of the various Systems are pooled and invested in the common Utah State Retirement Investment Fund (Investment Fund). Each of the Systems has equity in the Investment Fund based on funds contributed and earnings allocated. Earnings of the Investment Fund are allocated based on the average month-end balances of each of the respective Systems. Individual investments in the Investment Fund are not specifically identified to the respective Systems (see Note 3). For financial statement presentation, the Investment Fund assets, liabilities, revenues, and expenses have been allocated to and presented in each respective system in the basic financial statements as required for investment pools.

Investments are presented at fair value. The defined contribution investments are classified by investment manager classification. The fair value of investments is based on published market prices and quotations from major investment brokers at current exchange rates, as available. Many factors are considered in arriving at that value. Corporate debt securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

The fair value of real estate investments has been estimated based on independent appraisals and/or property cash flow. Short-term securities are reported at fair value when published market prices and quotations are available, or at cost plus accrued interest, which approximates market or fair value. For alternative investments (private equity, absolute return, and real assets) where no readily ascertainable fair value exists, management, in consultation with their investment advisors, value these investments in good faith based upon audited financials, cash-flow analysis, purchase and sales of similar investments, other practices used within the industry, or other information provided by the underlying investment advisors. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

Approximately 10.9% of the investments held in trust for pension benefits are invested in debt securities of the U.S. Government and its instrumentalities. Of the 10.9%, approximately 7.7% are U.S. Government debt securities and approximately 3.2% are debt securities of the U.S. Government instrumentalities. The Systems and Plans have no investments of any commercial or industrial organization whose fair value equals 5.0% or more of the Systems' or Plans' fiduciary net positions for pension benefits.

Investment policy. The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the URS Board. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan. The following was the URS Board's adopted asset allocation policy as of December 31, 2022:

Asset Class	Target Allocation
Equity securities	35%
Debt securities	20
Real assets	18
Private equity	12
Absolute return	15
Cash and cash equivalents	—
Total	100%

Rate of return. For the year ended December 31, 2022, the annual money-weighted rate of return on pension plan investment, net of pension plan investment expense, was a -5.23%. The money weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

C) Property and Equipment

Property and equipment are recorded at cost (see Note 4), are depreciated utilizing the straight-line method, and are included in the assets of the Investment Fund. The schedule below summarizes the estimated useful life by class. The Systems' policy is to capitalize all acquisitions of furniture and equipment with a unit cost of \$10,000 and computer software of \$1,000,000 or more.

Buildings	40 years
Building improvements	10 years
Furniture and equipment	3-10 years
Computer software	5 years

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

D) Administrative Expenses

Expenses for the administration of the Systems and Plans are budgeted and approved by the Board. Systems' expenses are paid from investment earnings. Plan expenses are paid from Plan assets.

E) Federal Tax Status

The Systems and Plans are exempt from Federal income taxes under the Internal Revenue Code.

F) Use of Estimates

Management of the Systems and Plans have made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these financial statements in conformity with GAAP. Actual results could differ from these estimates.

G) Subsequent Events

The Systems and Plans have performed an evaluation of subsequent events through May 31, 2023. No material events were identified by the Systems and Plans.

Note 3

Deposits and Investment Risk Disclosures

A) Deposits

Custodial Credit Risk for Deposits is the risk that in the event of a bank failure, the Systems' and Plans' deposits may not be returned to them. The deposits are held in one financial institution with an insured balance of \$250,000. Deposits in the bank in excess of \$250,000 are uninsured and uncollateralized, because they are not required to be by state statute.

Cash Deposits

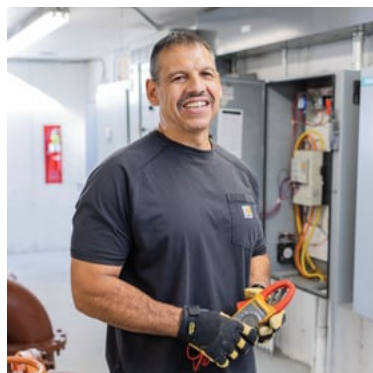
	<i>(in thousands)</i>	
Cash	\$	29,698
Disbursements in excess of cash balances		(54,799)
Total	\$	(25,101)

The Systems and Plans do not have a deposit policy for custodial credit risk. Deposits are presented in the basic financial statements at cost plus accrued interest that is also the market or fair value. As of December 31, 2022, the carrying amount of deposits totaled approximately -\$25,101,000 and the corresponding bank balance was \$7,900 of which none was exposed to custodial credit risk.

Investments	<i>(in thousands)</i>		Fair Value
	Defined Benefit	Defined Contribution	Total All Systems and Plans
Short-term securities pools	\$ 1,220,889	—	1,220,889
Debt securities	5,516,139	2,488,501	8,004,640
Equity securities	12,742,259	4,922,950	17,665,209
Absolute return	7,530,815	—	7,530,815
Private equity	5,529,627	—	5,529,627
Real assets	8,613,641	275,953	8,889,594
Investments held by broker-dealers under security lending program:			
Equity	328,422	—	328,422
Debt	943,486	—	943,486
Total investments	\$ 42,425,278	7,687,404	50,112,682
Securities lending collateral pool (not categorized)	\$ 1,392,143		1,392,143

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



B) Investments

The table on page 62 shows the Systems' and Plans' investments by type.

The investments listed below are not listed on national exchanges, over-the-counter markets, nor do they have quoted market prices available.

<i>(in thousands)</i>	12/31/2022
Private equity	\$ 5,529,627
Absolute return	7,530,815
Real assets	8,889,594
	\$ 21,950,036

The Systems and Plans value these investments in good faith at the Systems' and Plans' pro-rata interest in the net assets of these investments based upon audited financial statements or other information provided to the Systems and Plans by the underlying investment managers. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

C) Fair Value Measurements

The Systems and Plans categorize their fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

Level 1 Unadjusted quoted prices for identical instruments in active markets.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation.

The Systems and Plans assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The tables on pages 65-66 show the fair value leveling of the investments for the Systems and Plans. Equity and derivative securities classified in Level 1 are valued using prices quoted in active markets for those securities.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



Debt and debt derivative securities classified in Level 2 and Level 3 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Index linked debt securities are valued by multiplying the external market price feed by the applicable day's Index Ratio. Level 2 debt securities have non-proprietary information that was readily available to market participants, from multiple independent sources which are known to be actively involved in the market. Level 3 debt securities use proprietary information or single source pricing. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities. Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

Real assets classified in Level 3 are real estate investment generally valued using the income approach by internal manager reviews or independent external appraisers. The Systems and Plans policy is to obtain an external appraisal a minimum of every three years for properties or portfolios where the Systems and Plans have some degree of control or discretion. In practice, some investments are appraised annually. Appraisals are performed by an independent appraiser with preference for Member Appraisal Institute (MAI) designated appraisers.

The appraisals are performed using generally accepted valuation approaches applicable to the property type. The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on page 68.

Synthetic guaranteed investment contracts that are fully benefit-responsive are measured at contract value and do not participate in fair value changes.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Investments and Derivative Instruments Measured at Fair Value

	(in thousands)				Defined Benefit				Defined Contribution			
					Fair Value Measures Using				Fair Value Measures Using			
	12/31/22	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	12/31/22	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3				
Investments by fair value level												
Short-term securities	\$ 1,220,889	1,146,128	74,761	—	\$ —	—	—	—				
Debt securities												
Asset-backed	237,122	—	232,143	4,979	36,639	—	36,639	—				
Commercial mortgage-backed	116,031	—	104,426	11,605	1,682	—	1,166	516				
Corporate bonds	1,447,514	—	1,447,511	3	445,036	—	445,036	—				
Funds – other fixed income	36,121	—	25,566	10,555	68,953	—	68,953	—				
Government agencies	59,782	—	59,782	—	27,535	—	27,535	—				
Government bonds	1,665,964	—	1,665,964	—	299,882	—	299,882	—				
Government mortgage-backed securities	1,310,485	—	1,299,512	10,973	397,964	—	360,300	37,664				
Index linked government bonds	1,576,750	—	1,576,750	—	118,218	—	118,218	—				
Non-government backed C.M.O.s	15,299	—	8,207	7,092	2,419	—	1,758	661				
Total debt securities	6,465,068	—	6,419,861	45,207	1,398,328	—	1,359,487	38,841				
Equity investments												
Consumer goods	2,574,223	2,573,647	233	343	461,344	461,344	—	—				
Energy	509,700	509,223	—	477	107,729	107,729	—	—				
Equity other	671	135	—	536	21,369	21,369	—	—				
Financials	1,568,016	1,567,501	65	450	259,577	259,577	—	—				
Health care	1,481,496	1,475,799	—	5,697	397,288	397,288	—	—				
Industrials	1,509,570	1,509,381	—	189	188,300	188,300	—	—				
Information technology	2,034,762	2,034,742	—	20	679,167	679,167	—	—				
Materials	539,230	538,904	3	323	55,978	55,953	25	—				
Real estate investment trusts	415,979	415,296	—	683	67,789	67,789	—	—				
Telecommunication services	741,966	741,164	—	802	201,844	201,844	—	—				
Utilities	314,918	314,832	—	86	57,969	57,969	—	—				
Total equity investments	11,690,531	11,680,624	301	9,606	2,498,354	2,498,329	25	—				
Real assets												
Real estate	4,023,145	—	—	4,023,145	—	—	—	—				
Total real assets	4,023,145	—	—	4,023,145	—	—	—	—				
Total investments by fair value level	\$ 23,399,633	12,826,752	6,494,923	4,077,958	\$ 3,896,682	2,498,329	1,359,512	38,841				

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Investments and Derivative Instruments Measured at Fair Value <i>(Continued)</i>	<i>(in thousands)</i>				Defined Benefit				Defined Contribution			
	12/31/22	Fair Value Measures Using			12/31/22	Fair Value Measures Using						
		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs				
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3			
Investments measured at the net asset value (NAV)												
Short-term securities	\$	—			\$	—						
Equity investments												
Commingled equity funds		1,380,150				2,148,643						
Absolute return												
Directional		1,632,106				—						
Equity long/short		762,990				—						
Event driven		1,551,729				—						
Multistrategy		7,597				—						
Relative value		1,851,765				—						
Plus		1,724,628				—						
Total absolute return measured at the NAV		7,530,815				—						
Private equity – private equity partnerships		5,529,627				—						
Real assets												
Commingled real estate equity fund		—				275,953						
Agriculture		414,545				—						
Energy		1,683,476				—						
Esoteric		129,901				—						
Minerals		369,806				—						
Infrastructure		200,949				—						
Real Estate		1,399,146				—						
Royalty		77,262				—						
Timber		315,411				—						
Total real assets measured at the NAV		4,590,496				275,953						
Total investments measured at the NAV		19,031,088				2,424,596						
Total investments measured at fair value	\$	42,430,721				6,321,278						
Synthetic guaranteed investments contracts measured at contract value	\$	—				1,090,657						
Investments derivative instruments												
Short-term securities – options	\$	—	—	—	—	\$	—	—	—	—		
Debt securities												
Options		(791)	(791)	—	—	(282)	—	(282)	—	—		
Swaptions		(3,642)	—	(3,642)	—	(301)	—	(301)	—	—		
Swaps		(1,010)	—	(1,010)	—	99	—	99	—	—		
Total debt security derivatives		(5,443)	(791)	(4,652)	—	(484)	—	(484)	—	—		
Equity investments options												
Total investment derivatives instruments	\$	(5,443)	(791)	(4,652)	—	\$	(484)	—	(484)	—		
Invested securities lending collateral												
Short-term securities	\$	202,464	163,501	1,689	37,274	\$	—	—	—	—		
Debt securities		162,147	—	144,565	17,582		—	—	—	—		
Equity investments		1,027,532	1,027,532	—	—		—	—	—	—		
Total invested securities lending collateral	\$	1,392,143	1,191,033	146,254	54,856	\$	—	—	—	—		

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

Defined Benefit

1. **Commingled Equity Funds** and Commingled Small Cap Fund. This type consists of four institutional investment funds that invest in international equities, three funds that invest in domestic equities diversified across all sectors and one fund that invests in U.S. small cap equities. The fair values of the investments in these types have been determined using the NAV per share of the investments.
2. **Absolute Return Funds.** The fair values of the investments in this type have been determined using the NAV per share of the investments. *Directional funds* include investments in nine funds that attempt to generate returns by identifying momentum or trends across a variety of markets. *Equity long/short funds* include investments in four funds which maintain some level of equity market exposure (either net long or net short): however the level of market exposure may vary through time. *Event driven funds* include investments in twelve funds with a focus on securities that may benefit from the occurrence of an extraordinary corporate transaction or event (e.g. restructurings, takeovers, mergers, spin-offs, bankruptcy). One fund is in the process of redemption totaling \$1.2 million over the next year. *Multi-strategy funds* include investments in four funds. These funds represent a mix of the other absolute return strategies. One fund is in the process of redemption totaling \$38.8 million over the next 1-5 years. *Relative value funds* include investments in eleven funds. These funds seek returns by capitalizing on the mispricing of related securities or financial instruments. *Plus funds* include 24 limited partnerships in a variety of private markets and esoteric strategies intended to diversify the Absolute Return Portfolio. These investments are considered illiquid and have an approximate life of 5 to 10 years. No other funds currently have redemption restrictions.
3. **Private Equity Partnerships.** This type includes investments in limited partnerships. Generally speaking, the types of partnership strategies included in this portfolio are buyouts, venture capital, growth equity, and special situations. These investments have an approximate life of 10 years and are considered illiquid. Redemptions are restricted over the life of the partnership. During the life of the partnerships distributions are received as underlying partnership investments are realized. The majority of the private equity partnership investments are managed by two gatekeepers. Both gatekeepers manage discretionary accounts for URS. The gatekeepers and internal managers are required to manage the private equity portfolio in accordance with guidelines established by URS. The Systems have no plans to liquidate the total portfolio. As of December 31, 2022, it is probable that all the investments in this type will be sold at an amount different from the NAV per share (or its equivalent) of the Systems ownership interest in partners' capital.
4. **Energy, Mineral, Infrastructure, Esoteric and Royalty Funds.** Investments in *Energy* consist of forty private equity partnerships which invest primarily in oil and gas related investments. *Mineral funds* include ten private equity partnerships which invest in mineral mining equity securities, commodities and other mining investments. *Infrastructure* includes six private equity partnerships and four direct investments which invest primarily in renewable energy and telecommunications infrastructure. *Esoteric* funds consist of five private equity partnerships that invest in agriculture, food production and technology. *Royalty funds* include two private equity partnerships which invest primarily in drug royalties. These investments have an approximate life of 10 years and are considered illiquid. Redemption restrictions are in place over the life of the partnership. During the life of the partnerships distributions are received as underlying partnership investments are realized. As of December 31, 2022, it is probable that all the investments in this type will be sold at an amount different from the NAV per share (or its equivalent) of the Systems' ownership interest in partners' capital. The fair values of these investments have been determined using estimates provided by the underlying partnerships using recent observable transactions information for similar investments.
5. **Real Estate and Timber Funds.** *Real Estate* type includes eighty-seven investments which are invested primarily in apartments, industrial, office, specialty, and retail properties in the United States. *Timber* includes three funds which invest in timber related resources. *Agriculture* includes eleven investments which operate in the production, processing, and distribution of high value foods. Investments in these types can never be redeemed with the funds. Instead, the nature of these investments are that distributions from each investment will be received as the underlying investments are liquidated. Because it is probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the Systems' ownership interest in partners' capital.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Investments Measured at the NAV — Defined Benefit

<i>(in thousands)</i>	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Short-term securities – beta/overlays	\$ —	\$ —	Daily	None
Equity investments				
Commingled equity funds	1,380,150	—	Daily	None
Total equity investments	1,380,150	—		
Absolute return				
Directional	1,632,106	—	Monthly, Quarterly	3-60 days
Equity long/short	762,990	—	Monthly, Quarterly, Annually	30-60 days
Event driven	1,551,729	32,715	Monthly, Quarterly, Semi-annually, Annually, Bi-annually	45-120 days
Multistrategy	7,597	—	Monthly, Quarterly, Semi-annually, Annually	45-90 days
Relative value	1,851,765	—	Monthly, Quarterly, Semi-annually, Annually	Not applicable
Plus	1,724,628	899,899	Not applicable	N/A
Total absolute return	7,530,815	932,614		
Private equity – partnerships	5,529,627	847,229	Not eligible	N/A
Real assets				
Agriculture	414,545	50,183	Not eligible	NA
Energy	1,683,476	552,121	Not eligible	NA
Esoteric	129,901	46,891		
Minerals	369,806	167,348	Not eligible	NA
Infrastructure	200,949	148,332	Not eligible	NA
Real Estate	1,399,146	559,254	Not eligible	NA
Royalty	77,262	—	Not eligible	NA
Timber	315,411	—	Not eligible	NA
Total real assets	4,590,496	1,524,129		
Total investments measured at the NAV	\$ 19,031,088	\$ 3,303,972		

*See redemption descriptions for these investment types on page 67.

Defined Contribution

Commingled Funds. The fair values of the investments in this type have been determined using the NAV per share of the investments. The commingled real estate fund is comprised of institutional quality commercial real estate across a broad range of real estate asset types. The other funds invest in securities indicative of their name.

Investments Measured at the NAV — Defined Contribution

<i>(in thousands)</i>	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Equity securities				
Commingled funds	\$ 2,148,643	—	Daily	None
Total equity securities	2,148,643	—		
Real assets				
Commingled real estate equity fund	275,953	—	Quarterly	N/A
Total real assets	275,953	—		
Total investments measured at the NAV	\$ 2,424,596	—		

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Debt Securities Investments

December 31, 2022

Investment	Defined Benefit Plans		Defined Contribution Plans		Total All Systems and Plans			
	(dollars in thousands)	Fair Value	Effective Weighted Duration	Fair Value		Effective Weighted Duration		
Asset-backed securities	\$	237,122	2.09	\$	36,639	1.52	\$	273,761
Commercial mortgage-backed		116,031	3.39		1,682	0.03		117,713
Corporate bonds		1,447,514	7.42		445,036	6.20		1,892,550
Fixed income other		30,678	0.70		68,469	—		99,147
Government agencies		59,783	7.58		27,535	5.62		87,318
Government bonds		1,665,964	9.91		299,882	9.63		1,965,846
Government mortgage-backed securities		1,310,484	6.70		397,965	4.68		1,708,449
Index linked bonds		1,576,750	9.58		118,218	4.45		1,694,968
Non-government backed C.M.O.s		15,299	5.87		2,418	3.25		17,717
Total measured at fair value		6,459,625	6.55		1,397,844	5.66		7,857,469
Synthetic guaranteed investment contracts measured at fair value		—			1,090,657	—		1,090,657
Total	\$	6,459,625		\$	2,488,501	—	\$	8,948,126

D) Credit Risk Debt Securities

The Systems and Plans expect their domestic debt securities investment managers to maintain diversified portfolios by sector and by issuer by using the following guidelines:

- » U.S. Government Agency Securities — no restriction
- » Total portfolio quality will maintain a minimum overall rating of "A".
- » Securities with a quality rating of below BBB- are considered below investment grade. For the Systems, no more than 5% of an investment manager's assets can be below investment grade and no more than 1% of an investment manager's assets can be with a single below investment grade issuer. For the Plans, no more than 15% of an investment manager's assets can be below investment grade.
- » Upon approval, a domestic debt securities investment manager may invest up to 10% of the portfolio in non-U.S. dollar denominated bonds.

For the Systems, global debt securities investment managers may hold up to 25% of the fair value of their portfolios in securities rated below investment grade (below BBB-/Baa3). The remaining assets will have an investment grade rating. For the Plans, international debt securities investment managers may hold up to 20% of the fair value of their portfolios in securities rated below investment grade (below BBB-/ Baa3). The remaining assets will have an investment grade rating.

The Systems' and Plans' weighted quality rating average of the global debt securities, excluding pooled investments, as of December 31, 2022, was BBB+, and the fair value of below grade investments was \$126,530,000 or 1.41%.

The notation N/R represents those securities that are not rated, and N/A represents those securities for which the rating disclosure requirements are not applicable such as obligations of the United States Government and obligations guaranteed by the United States Government.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Credit Risk Debt Securities at Fair Value

At December 31, 2022

(in thousands)

Defined Benefit Plans

Quality Rating	Fair Value	Asset-Backed Securities	Commercial Mortgage-Backed Securities	Corporate Bonds	Fixed Income Other	Government Agencies	Government Bonds	Defined Benefit Plans		
								Government Mortgage-Backed Securities	Index Linked Government Bonds	Non-Government Backed C.M.O.s
AAA	\$ 453,358	218,151	101,094	4,260	—	8,816	21,720	—	90,981	8,336
AA+	69,707	18	—	42,102	—	25,712	1,862	—	—	13
AA	135,067	546	3,775	18,583	—	6,114	10,564	—	95,485	—
AA-	367,748	—	1,022	52,598	—	—	29,029	—	285,065	34
A+	191,921	—	—	105,774	—	313	46,699	—	39,135	—
A	185,751	13,845	—	168,882	—	—	2,265	—	—	759
A-	355,239	—	2,591	342,135	—	6,757	3,756	—	—	—
BBB+	280,951	1,023	533	240,321	—	1,202	28,414	—	9,458	—
BBB	272,113	—	—	241,871	—	715	29,527	—	—	—
BBB-	280,855	—	—	213,971	—	—	3,376	—	63,499	9
BB+	16,362	—	—	8,023	—	865	7,190	—	—	284
BB	11,101	—	—	2,151	—	—	8,818	—	—	132
BB-	86	79	—	—	—	—	—	—	—	7
B+	2,741	21	—	2,720	—	—	—	—	—	—
B	1,711	—	—	1,560	—	—	—	—	—	151
CCC	554	293	—	—	—	—	—	—	—	261
CCC-	429	325	—	—	—	—	—	—	—	104
D	108	108	—	—	—	—	—	—	—	—
N/R	2,041,406	2,713	7,016	2,563	30,678	9,288	561,040	1,101,902	320,997	5,209
Subtotal	4,667,208	237,122	116,031	1,447,514	30,678	59,782	754,260	1,101,902	904,620	15,299
N/A	1,792,417									
Total debt securities investments	\$ 6,459,625									

Defined Contribution Plans

Quality Rating	Fair Value	Asset-Backed Securities	Commercial Mortgage-Backed Securities	Corporate Bonds	Fixed Income Other	Government Agencies	Government Bonds	Defined Contribution Plans		
								Government Mortgage-Backed Securities	Index Linked Government Bonds	Non-Government Backed C.M.O.s
AAA	\$ 11,877	1,633	294	—	—	1,777	6,799	—	502	872
AA+	31,125	27,355	—	510	—	1,233	2,027	—	—	—
AA	992	—	—	992	—	—	—	—	—	—
AA-	14,544	—	—	3,245	—	—	11,299	—	—	—
A+	3,033	656	—	2,377	—	—	—	—	—	—
A	5,777	1,285	—	4,492	—	—	—	—	—	—
A-	38,806	—	—	36,670	—	2,136	—	—	—	—
BBB+	118,178	—	—	106,865	—	—	11,313	—	—	—
BBB	150,710	—	—	128,678	—	22,032	—	—	—	—
BBB-	62,817	—	—	62,276	—	—	541	—	—	—
BB+	55,821	—	—	53,244	—	—	2,577	—	—	—
BB	3,644	—	—	1,138	—	—	2,506	—	—	—
BB-	23,181	—	—	23,181	—	—	—	—	—	—
B+	10,792	—	—	10,792	—	—	—	—	—	—
N/R	671,845	5,710	1,388	10,576	68,469	357	168,116	355,427	60,256	1,546
Subtotal	1,203,142	36,639	1,682	445,036	68,469	27,535	205,178	355,427	60,758	2,418
N/A	194,702									
Total debt securities investments	\$ 1,397,844									
Synthetic Guaranteed Investment Contracts	\$ 1,090,657									
Total	\$ 2,488,501									

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

E) Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, the Systems and Plans will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. The Systems and Plans do not have an investment policy regarding custodial credit risk. As of December 31, 2022, the table below represents the investments that have custodial credit risk. The \$18,569,000 frictional cash and cash equivalents subject to custodial credit risk are in foreign banks in the Systems' and Plans' name. Because it is in foreign banks, it is subject to custodial credit risk. URS does not have an investment policy regarding custodial credit risk for frictional cash in foreign banks.

Custodial Credit Risk

Exposed to Custodial Credit Risk

Type from	(in thousands)	Fair Value
Cash and cash equivalents	\$	18,569

Exposure to Custodial Credit Risk Not Determined

Investment	(in thousands)	Fair Value
Other assets	\$	734,541

F) Concentrations Credit Risk

The Systems and Plans expect investment managers to maintain diversified portfolios by sector and by issuer using the following guidelines:

- » AAA/Aaa Debt Securities — no more than 5% of an investment manager's assets at market with a single issuer.
- » AA/Aa Debt Securities — no more than 4% of an investment manager's assets at market with a single issuer.
- » A/A Debt Securities — no more than 3% of an investment manager's assets at market with a single issuer.
- » BBB/Baa Debt Securities — for the Systems, no more than 2% of an investment manager's assets at market with a single issuer.

- » For Debt Securities — for the Systems, no individual holding will constitute more than 10% of the fair value of outstanding debt of a single issuer with the exception of the U.S. Government or its agencies, or collateralized mortgage obligations.

As of December 31, 2022, there were no single issuer investments that exceeded the above guidelines.

G) Interest Rate Risk

The Systems and Plans manage their exposure to fair value loss arising from increasing interest rates by complying with the following policy:

- » For domestic debt securities managers, an individual debt securities investment manager's portfolio will have an effective duration between 75-125% of the effective duration of the appropriate index.
- » The international debt securities investment managers will maintain an effective duration of their portfolio between 80-120% of the appropriate index.
- » The global debt securities investment managers will maintain an effective duration of their portfolio between 75-125% of the appropriate index.
- » The global debt inflation-linked debt securities investment managers will maintain an effective duration of their portfolio between 80-120% of the appropriate index.

Duration is a measure of a debt investment's exposure to fair value changes arising from changes in interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price.

The Systems compare an investment's effective duration against the Bloomberg US Aggregate Bond Index for domestic debt securities, the Bloomberg Global Aggregate Bond Index (USD hedged) for global debt securities and the Bloomberg World Government Inflation-Linked Bond Index (USD hedged) for inflation-linked debt securities. The index duration range as of December 31, 2022, was 4.63 to 7.71 for domestic debt securities, 5.02 to 8.36 for global debt securities, and 7.46 to 11.18 for inflation-linked debt securities.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

The Plans compare an investment's effective duration against the Bloomberg US Aggregate Bond Index for domestic debt securities, the Bloomberg Global Aggregate ex-US Bond Index (USD hedged) for international debt securities and the Bloomberg Global Inflation Linked Bond Index 1-10 Year (USD hedged) for inflation-linked debt securities. The index duration range as of December 31, 2022, was 4.63 to 7.71 for domestic debt securities, 5.75 to 8.63 for international debt securities, and 3.76 to 5.64 for inflation-linked debt securities.

As of December 31, 2022, no individual debt securities investment manager's portfolio was outside of the policy guidelines. As of December 31, 2022, the table on page 69 shows the debt securities investments by investment type, amount, and the effective weighted duration.

H) Foreign Currency Risk

The Systems and Plans expect the International Securities Investment Managers to maintain diversified portfolios by sector and by issuer using the following guidelines:

- » International investment managers invest in fixed income instruments and equity instruments of corporations headquartered outside of the United States unless specifically authorized within the investment managers' contract.
- » Domestic investment managers are allowed to invest in international corporations traded in American Depository Receipts (ADR).
- » Portfolios should be adequately diversified to limit foreign currency and security risk.

Risk of loss arises from changes in currency exchange rates. The Systems' and Plans' exposure to foreign currency risk is shown on page [73](#).

I) Securities Lending

The Systems participate in a securities lending program as authorized by Board policy, whereby securities are transferred to an independent broker or dealer in exchange for collateral in the form of cash, government securities, and irrevocable bank letters of credit, equal to approximately 102% of the fair value of the domestic securities on loan and 105% of the fair value of the international securities on loan, with a simultaneous agreement to return the collateral for the same securities in the future. The custodial bank is the agent for the securities lending program. Securities under loan are maintained in the financial records, and corresponding liabilities are recorded for the fair value of the collateral received.

At December 31, 2022, there was no credit risk exposure to borrowers because the collateral exceeded the amount borrowed. The securities on loan at year end were \$1.27 billion which are comprised of \$328 million of equity investments and \$943 million in debt securities. The collateral received for those securities on loan was \$1,392 million. The collateral received from broker dealers was comprised of \$202 million in cash and short-term securities, \$162 million in debt securities, and \$1,028 million in equity investments. Under the terms of the lending agreement, the Systems are indemnified against loss should the lending agent be unable to recover borrowed securities and distributions due to borrower insolvency or failure of the lending agent to properly evaluate the credit worthiness of the borrower. In addition, the Systems are indemnified against loss should the lending agent fail to demand adequate and appropriate collateral on a timely basis. All securities loaned can be terminated on demand by either the Systems or the borrower. Cash collateral is invested in the lending agent's short-term investment pool.

The short-term investment pool guidelines specify that a minimum of 20% of the invested cash collateral is to be available each business day and the dollar weighted average maturity of holdings should not exceed 60 days. The relationship between the maturities of the short-term investment pool and the Systems' loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the Systems cannot determine. Because the securities lending collateral is in a pool maintained by the custodial bank, the Systems do not have the ability to pledge or sell the securities, and it is not necessary to report the total income and expenses of securities lending.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Foreign Currency Risk

International Investment Securities at Fair Value at December 31, 2022

Currency	(in thousands)							Defined Contribution Plans			Total All Systems and Plans
	Short-Term	Debt	Equity	Absolute Return	Private Equity	Real Assets	Total	Debt	Equity	Total	
Australian dollar	\$ 1,313	21,093	161,743	—	930	—	185,079	7,314	51,727	59,041	244,120
Brazilian real	226	3,426	103,145	—	—	—	106,797	1,062	—	1,062	107,859
British pound sterling	1,458	382,026	543,659	37,255	56,731	—	1,021,129	34,006	109,834	143,840	1,164,969
Canadian dollar	1,486	43,699	422,667	—	—	—	467,852	15,402	74,605	90,007	557,859
Chilean peso	1,484	—	37,117	—	—	—	38,601	—	1,676	1,676	40,277
Chinese yuan renminbi	4	11,683	3,180	—	—	—	14,867	6,168	79,063	85,231	100,098
Colombian peso	57	—	1,852	39,592	—	—	41,501	—	346	346	41,847
Czech koruna	84	—	1,139	—	—	—	1,223	—	362	362	1,585
Danish krone	27	2,127	45,608	—	—	—	47,762	211	17,777	17,988	65,750
Egyptian pound	13	—	655	—	—	—	668	—	303	303	971
Euro	9,009	613,827	1,044,178	552,481	242,162	22,804	2,484,461	137,343	190,952	328,295	2,812,756
Hong Kong dollar	902	24,408	668,934	—	—	—	694,244	14,524	18,093	32,617	726,861
Hungarian forint	53	—	14,660	—	—	—	14,713	—	468	468	15,181
Iceland krona	23	—	172	—	—	—	195	—	—	—	195
Indian rupee	178	—	142,362	—	—	—	142,540	—	40,454	40,454	182,994
Indonesian rupiah	47	2,980	17,668	—	—	—	20,695	1,583	5,434	7,017	27,712
Japanese yen	2,499	103,946	671,130	—	—	—	777,575	50,413	146,291	196,704	974,279
Kuwaiti dinar	83	—	9,039	—	—	—	9,122	—	2,642	2,642	11,764
Malaysian ringgit	157	3,427	28,920	—	—	—	32,504	1,994	4,744	6,738	39,242
Mexican peso	393	20,191	62,833	48,966	—	—	132,383	6,564	6,437	13,001	145,384
Moroccan dirham	16	—	—	—	—	—	16	—	—	—	16
New Israeli shekel	26	—	15,331	—	—	—	15,357	—	6,336	6,336	21,693
New Romanian leu	24	—	698	—	—	—	722	—	—	—	722
New Taiwan dollar	171	—	122,463	—	—	—	122,634	—	39,698	39,698	162,332
New Zealand dollar	96	16,838	7,998	—	—	—	24,932	3,283	2,219	5,502	30,434
Norwegian krone	31	—	18,683	—	—	—	18,714	—	6,310	6,310	25,024
Pakistani rupee	—	—	—	—	—	—	—	—	2	2	2
Peruvian nuevo sol	22	—	—	—	—	—	22	—	611	611	633
Philippine peso	76	—	44,682	—	—	—	44,758	—	2,154	2,154	46,912
Polish zloty	33	—	52,457	—	—	—	52,490	—	2,102	2,102	54,592
Qatar riyal	—	—	—	—	—	—	—	—	2,684	2,684	2,684
Russian ruble	—	—	—	—	—	—	—	—	4	4	4
Saudi riyal	105	—	39,499	—	—	—	39,604	—	10,768	10,768	50,372
Singapore dollar	154	2,130	30,140	—	—	—	32,424	1,335	10,001	11,336	43,760
South African rand	487	8,818	34,415	—	—	—	43,720	2,506	10,065	12,571	56,291
South Korean won	347	14,619	121,126	—	—	—	136,092	7,349	31,792	39,141	175,233
Swedish krona	124	11,839	133,569	—	—	—	145,532	2,338	22,904	25,242	170,774
Swiss franc	407	3,607	206,486	14,038	—	—	224,538	2,289	57,798	60,087	284,625
Thai baht	32	2,147	22,995	—	—	—	25,174	1,257	6,798	8,055	33,229
Turkish lira	509	—	10,006	—	—	—	10,515	—	2,331	2,331	12,846
United Arab Emirates dirham	60	—	14,863	—	—	—	14,923	—	3,447	3,447	18,370
Total securities subject to foreign currency risk	\$ 22,216	1,292,831	4,856,072	692,332	299,823	22,804	7,186,078	296,941	969,232	1,266,173	8,452,251

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

J) Derivative Financial Instruments

The Systems and Plans invest in derivative financial investments as authorized by Board policy. Derivatives are financial arrangements between two parties whose payments are based on, or “derived” from, the performance of some agreed-upon benchmark. All derivatives are considered investments. The fair value of all derivative financial instruments is reported in the Statements of Fiduciary Net Position. Within the investment asset class, swaptions are recorded in debt securities. By policy, portfolio liabilities associated with investments will be backed by cash equivalents or deliverable securities. URS does not have a policy regarding master netting arrangements. As of December 31, 2022, the Systems and Plans had five types of derivative financial instruments: futures, currency forwards, options, swaps, and Synthetic Guaranteed Investment Contracts (SGIC).

Futures

Futures represent commitments to purchase (asset) or sell (liability) securities at a future date and at a specified price. Futures contracts are traded on organized exchanges (exchange traded) thereby minimizing the Systems’ and Plans’ credit risk. The net change in the futures contracts value is settled daily in cash with the exchanges. Net gains or losses resulting from the daily settlements are included with trading account securities gains in the Statements of Changes in Fiduciary Net Position. As of December 31, 2022, the Systems’ and Plans’ investments had the notional futures balances as shown below.

Futures

		<i>(in thousands)</i>		Notional Value	
				Defined Benefit Plans 2022	Defined Contribution Plans 2022
Cash & Cash Equivalents	Long	\$	—	—	—
	Short		(109,183)	—	—
Equity	Long		13,209	—	—
	Short		(52,075)	(28,378)	—
Fixed Income	Long		690,937	101,089	—
	Short		(412,660)	(158,403)	—
Total Futures		\$	130,228	(85,692)	—

Currency Forwards

Currency forwards represent forward foreign exchange contracts that are entered into in order to hedge the exposure to changes in foreign currency exchange rate on the foreign currency denominated portfolio holdings. A forward foreign exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. The gain or loss arising from the difference between the original contracts and the closing of such contracts is included in the net realized gains or losses on foreign currency related transactions in the Statements of Changes in Fiduciary Net Position. As of December 31, 2022, the Systems’ and Plans’ investments included the currency forwards balances on page 75.

Options

Options represent or give buyers the right, but not the obligation, to buy (call) or sell (put) an asset at a preset price over a specified period. The option’s price is usually a small percentage of the underlying asset’s value. As a writer of financial options, the Systems and Plans receive a premium at the outset of the agreement and bear the risk of an unfavorable change in the price of the financial instrument underlying the option. As a purchaser of financial options, the Systems and Plans pay a premium at the outset of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As of December 31, 2022, the Systems’ and Plans’ investments had the option balances shown below.

Options

		<i>(in thousands)</i>		Fair Value	
				Defined Benefit Plans 2022	Defined Contribution Plans 2022
Equity	Call	\$	—	—	—
	Put		—	—	—
Fixed Income	Call		588	144	—
	Put		(1,379)	(426)	—
Swaptions	Call		(704)	(58)	—
	Put		(2,937)	(243)	—
Total Options		\$	(4,432)	(583)	—

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Currency Forwards

Currency	Defined Benefit Plans				Defined Contribution Plans			
	Notional Cost	Pending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Fair Value 2022	Notional Cost	Pending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Fair Value 2022
Australian dollar	\$ (21,335)	2,521	(24,032)	(21,511)	\$ (7,448)	490	(8,024)	(7,534)
Brazilian real	(3,278)	—	(3,319)	(3,319)	(1,016)	—	(1,029)	(1,029)
British pound sterling	(386,835)	31,209	(418,130)	(386,921)	(34,548)	928	(35,298)	(34,370)
Canadian dollar	(44,544)	2,246	(46,925)	(44,679)	(9,314)	300	(9,676)	(9,376)
Czech koruna	2,325	7,074	(4,734)	2,340	721	2,196	(1,475)	721
Danish krone	(2,292)	2,194	(4,588)	(2,394)	(200)	336	(548)	(212)
Euro	(626,422)	46,019	(682,483)	(636,464)	(145,489)	22,920	(169,840)	(146,920)
HK offshore Chinese yuan renminbi	(35,663)	—	(35,957)	(35,957)	(20,321)	—	(20,489)	(20,489)
Hong Kong dollar	1,103	1,103	(3)	1,100	(1)	594	(594)	—
Indian rupee	(4)	1,905	(1,905)	—	(1,497)	—	(1,511)	(1,511)
Indonesian rupiah	(2,857)	—	(2,884)	(2,884)	(53,753)	23	(56,153)	(56,130)
Japanese yen	(101,932)	279	(106,695)	(106,416)	(1,991)	—	(1,994)	(1,994)
Malaysian ringgit	(3,493)	—	(3,499)	(3,499)	(6,439)	60	(6,599)	(6,539)
Mexican peso	(19,987)	713	(21,014)	(20,301)	(1)	1,887	(1,887)	—
New Taiwan dollar	(2)	6,096	(6,096)	—	(3,224)	1,497	(4,726)	(3,229)
New Zealand dollar	(16,739)	4,847	(21,697)	(16,850)	(1,310)	—	(1,329)	(1,329)
Norwegian krone	2	189	(186)	3	(2,416)	—	(2,499)	(2,499)
Singapore dollar	(2,163)	—	(2,195)	(2,195)	(7,532)	781	(8,617)	(7,836)
South African rand	(8,802)	—	(9,101)	(9,101)	(2,421)	20	(2,445)	(2,425)
South Korean won	(15,592)	2,528	(18,756)	(16,228)	(851)	2,271	(3,122)	(851)
Swedish krona	(12,123)	104	(12,286)	(12,182)	(1,208)	—	(1,220)	(1,220)
Swiss franc	902	7,346	(6,430)	916				
Thai baht	(2,066)	—	(2,087)	(2,087)				
United States dollar	1,301,797	1,394,951	(93,155)	1,301,796	300,259	327,302	(27,043)	300,259
Total forwards subject to foreign currency risk	\$ —	1,511,324	(1,528,157)	(16,833)	\$ —	361,605	(366,118)	(4,513)

Swaps

The Systems and Plans have entered into various inflation, overnight indexed and interest rate swap agreements in an attempt to manage their exposure to inflation, credit and interest rate risk. Interest rate and inflation risk represents the exposure to fair value losses arising from inflation and the future changes in prevailing market interest rates. Credit risk is an investor's risk of loss arising from a borrower who does not make payments as promised. Swaps represent an agreement between two or more parties to exchange sequences of cash flows over a period in the future. In the most common type of interest rate swap arrangement, one party agrees to pay fixed interest payments on designated dates to a counterparty,

who in turn agrees to make return interest payments that float with some reference rate. The real estate interest rate swaps allowed the Systems to effectively convert most of their long-term variable interest rate credit facility loans into fixed interest rate loans, thereby mitigating some of their interest rate risk. All swap instruments contain collateral clauses.

Gains and losses on swaps are determined based on fair values and are recorded in the Statements of Changes in Fiduciary Net Position. Swap fair values are determined by an independent third party. As of December 31, 2022, the Systems' and Plans' investments had the swap fair value balances as shown in the table on page 76.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Swaps

(in thousands)	Fair Value	
	Defined Benefit Plans 2021	Defined Contribution Plans 2021
Fixed Income Portfolio Swaps		
Interest Rate Swaps		
Pay Fixed Receive Variable	\$ —	—
Pay Variable Receive Fixed	—	—
Retail Price Index Swaps		
Pay Fixed Receive Fixed	(431)	101
Pay Variable Receive Variable	(166)	(122)
Overnight Indexed Swaps		
Pay Fixed Receive Fixed	2,682	69
Pay Variable Receive Variable	(2,883)	(153)
Other	(213)	204
Total Swaps	\$ (1,011)	99

Derivative Credit Risk at Fair Value

Quality Rating	(in thousands)			
	Forwards	Options	Swaps	Total
AA	\$ (1)	—	—	(1)
AA-	(2,180)	—	—	(2,180)
A+	(9,326)	(827)	—	(10,153)
A	(3)	97	—	94
A-	(7,028)	(4,189)	(618)	(11,835)
BBB+	(3,007)	(285)	—	(3,292)
BBB	199	7	—	206
N/R	—	182	—	182
Total subject to credit risk	\$ (21,346)	(5,015)	(618)	(26,979)

Derivative Credit Risk

Derivatives that are exchange traded are not subject to credit risk. No derivatives held are subject to custodial credit risk. The maximum loss that would be recognized as of December 31, 2022, if all counterparties fail to perform as contracted was \$7,899,284. Derivative credit risk at fair value is shown in the lower table at left. This maximum exposure is reduced by of liabilities, resulting in zero exposure to credit risk. Credit ratings for the wrap contracts associated with the SGICs are noted in the table below on pages 76-77. As of December 31, 2022, the counterparties' credit ratings for currency forwards, options, and swaps are subject to credit risk.

Synthetic Guaranteed Investment Contracts

In the Utah Retirement Systems Defined Contribution Plans, members are able to participate in Synthetic Guaranteed Investment Contracts (SGICs). The SGICs are fully benefit responsive, which means that Utah Retirement Systems is prohibited from assigning and selling the contract or its proceeds to a third party without the consent of the issuer. Prospective interest crediting rate adjustments are provided to plan participants. The SGICs provide assurance that the probability of future rate adjustments resulting in an interest crediting rate less than zero is remote. The underlying investments are high credit quality averaging A+ and therefore credit loss is remote. The terms of the SGICs require all plan participants to initiate transactions within the fund at contract value. The contract value is the fair value (cost plus accrued interest).

The fair value of these contracts as of December 31, 2022, was \$1,090,657 and the market value was \$1,023,333.

Synthetic Guaranteed Investment Contracts Underlying Investments

Underlying Investments	1-5 Yr. Government/Credit Bond			
	Book Value	Market Value	Duration	Credit Rating
Asset-backed securities	\$ 49,313	46,269	1.33	AAA
Agencies	34,651	32,512	1.10	AA+
Corporates	232,112	217,785	2.40	A-
Non Corporate	5,116	4,800	2.60	AA3
Government mortgage-backed securities	25,105	23,555	2.85	AA+
United States treasuries	150,153	140,885	1.67	AA+
Commercial mortgaged-backed securities	28,797	27,019	1.52	AA+
Cash	2,162	2,029	—	—
Total	\$ 527,409	494,854	—	—

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Wrap Contracts

(in thousands)

Contract Issuer	Book Value	Market Value	Rate	Duration	Quality Rating
American General	\$ 218,131	204,667	2.55%	3.19	A+
Lincoln National Life	109,066	102,333	2.55	3.19	A+
MetLife	109,065	102,334	2.55	3.19	AA-
Pacific Life	109,066	102,333	2.55	3.19	AA-
Prudential	109,066	102,333	2.55	3.19	AA-
Royal Bank of Canada	109,065	102,334	2.55	3.19	AA-
RGA Reinsurance	109,066	102,333	2.55	3.19	AA-
Transamerica	109,066	102,333	2.55	3.19	AA-
State State Bank	109,066	102,333	2.55	3.19	A+
Subtotal wrap contracts	1,090,657	1,023,333			
Merrill Lynch repurchase	—	—			
Total	\$ 1,090,657	1,023,333			

K) Investment Payables

The Defined Benefit investment accounts payable are comprised of investment advisor fees payable of \$9,250,801, administrative expenses payable of \$10,406,186 and investment purchases payable of \$571,089,029. The Defined Contribution investment payable of \$26,607,418 is comprised of investment payables of \$1,286,031 and administrative payables of \$25,321,387.

L) Investment Compliance Officer

The Systems and Plans have an investment compliance officer on staff who reports his/her findings directly to the Board. The investment compliance officer monitors the investments made by the investment managers to determine the investments were made in accordance with the investment policies that were approved by the Board.

	Intermediate Government/Credit Bond				MetLife Separate Account				Total Underlying Investments	
	Book Value	Market Value	Duration	Credit Rating	Book Value	Market Value	Duration	Credit Rating	Book Value	Market Value
\$	32,077	30,097	1.68	AAA	\$ 6,763	6,345	2.29	AA+	\$ 88,152	82,711
	18,583	17,436	2.42	AA+	—	—	—	AA+	53,234	49,948
	212,445	199,331	4.41	A-	39,614	37,168	5.44	A-	484,171	454,284
	12,747	11,960	3.64	AA3	684	642	6.66	AA3	18,547	17,402
	69,710	65,407	4.91	AA+	24,392	22,887	5.43	AA+	119,207	111,848
	82,877	77,761	3.14	AA+	19,884	18,656	9.93	AA+	252,914	237,302
	36,933	34,653	1.39	AAA	4,422	4,149	2.79	AA+	70,151	65,821
	1,541	1,446	—	—	578	542	—	—	4,281	4,017
\$	466,913	438,091	—	—	\$ 96,337	90,389	—	—	\$ 1,090,657	1,023,333

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



Note 4 Property and Equipment

Property and equipment consist of the amounts shown in the following table as of December 31, 2022 and 2021. There were no significant leases as of December 31, 2022 or 2021.

Property and Equipment

(in thousands)

	2022	2021
Land	\$ 1,780	1,780
Buildings and building improvements	21,517	21,042
Furniture and equipment	5,435	5,248
Computer Software	25,679	18,340
Total property and equipment	54,411	46,410
Less accumulated depreciation:		
Buildings and building	12,249	11,765
Furniture and equipment	5,835	5,122
Computer Software	5,812	5,426
Total accumulated depreciation	23,896	22,313
Less operating reserves	12,214	11,275
Net property and equipment	\$ 18,301	12,822

Note 5 Net Pension Liability of Employers

The net pension liability (i.e., the retirement system's liability determined in accordance with GASB Statement No. 67 less the fiduciary net position) as of December 31, 2022, is as shown on page 79.

Actuarial valuation of the ongoing Systems involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The most recent experience study was conducted for the five-year period ending December 31, 2020. The Schedule of Employers' Net Pension Liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The Total Pension Liability as of December 31, 2022, is based on the results of an actuarial valuation date of January 1, 2022, and rolled-forward using generally accepted actuarial procedures.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Net Pension Liability of Employers

System	(dollars in thousands)						(6) Net Pension Liability/(Asset) as a % of Projected Covered Payroll (3) / (5)
	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers' Net Pension Liability/(Asset) (1) - (2)	(4) Plan Fiduciary Net Position as a % of the Total Pension Liability (2) / (1)	(5) Projected Covered Payroll		
Noncontributory Retirement System	\$ 34,931,362	32,602,563	2,328,799	93.3%	\$ 3,360,198	69.3%	
Contributory Retirement System	1,238,805	1,216,375	22,430	98.2	26,521	84.6	
Public Safety Retirement System	5,115,440	4,769,175	346,265	93.2	313,938	110.3	
Firefighters Retirement System	1,533,404	1,685,243	(151,839)	109.9	114,702	(132.4)	
Judges Retirement System	297,575	262,307	35,268	88.1	21,202	166.3	
Utah Governors and Legislative Retirement Plan	13,166	12,122	1,044	92.1	564	185.1	
Tier 2 Public Employees Contributory Retirement System	1,412,220	1,303,331	108,889	92.3	2,099,223	5.2	
Tier 2 Public Safety and Firefighter Contributory Retirement System	231,743	223,401	8,342	96.4	265,137	3.1	
Total	\$ 44,773,715	42,074,517	2,699,198	94.0%	\$ 6,201,485	43.5%	

Summary of Actuarial Assumptions

	Noncontributory	Contributory	Public Safety	Firefighters	Judges	Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter
Valuation date	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age
Actuarial assumptions:								
Investment rate of return	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%
Projected salary increases	3.25-9.25%	3.25-9.25%	3.25-6.75%	3.25-8.50%	0.0325	None	3.25-9.25%	3.25-8.50%
Inflation rate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Post-retirement cost-of-living adjustment	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Mortality: (Non-educators)	Male retirees: 110% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 110% of 2020 PR UTAH Retiree Mortality Table for females, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020.							
Mortality: (Educators)	Male retirees: 90% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 90% of 2020 PR UTAH Retiree Mortality Table for females, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020.							

Note: All post-retirement cost-of-living adjustments are noncompounding and are based on the original benefit except for Judges, which is a compounding benefit. The cost-of-living adjustments are also limited to the actual CPI increase for the year, although unused CPI increases not met may be carried forward to subsequent years.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Systems target asset allocation as of December 31, 2022, are summarized in the table below.

Target Allocations

Asset Class	Expected Return Arithmetic Basis		
	Target Asset Allocation	Real Return Arithmetic Basis	Long-term Expected Portfolio Real Rate of Return*
Equity securities	35%	6.58%	2.30%
Debt securities	20	1.08	0.22
Real assets	18	5.72	1.03
Private equity	12	9.80	1.18
Absolute return	15	2.91	0.44
Cash and cash equivalents	0	(0.11)	0.00
Totals	100%		5.17%
Inflation			2.50
Expected arithmetic nominal return			7.67%

*The total URS Defined Benefit long-term expected rate of return is 6.85%, which is comprised of a 2.50% inflation assumption and a 4.35% net real rate of return.

The discount rate used to measure the total pension liability was 6.85%. The projection of cash flows used to determine the discount rate assumed contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates under Utah State Code. Based on those assumptions, the Systems' fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

In accordance with GASB Statement No. 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the table to the left presents the net pension liability/ (asset) of the participating employers calculated using the discount rate of 6.85%, as well as what the employers' net pension liability/(asset) would be if it were calculated using a discount rate that is 1.00% lower (5.85%) or 1.00% higher (7.85%) than the current rate.

Employer contribution rates consist of (1) an amount for normal cost, the estimated amount necessary to finance benefits earned by the members during the current year, and (2) an amount for amortization of the unfunded or excess funded actuarial accrued liability over an open 20-year amortization period. The rates are determined using the entry age actuarial cost method.

Changes in Discount Rate

Asset Class	(dollars in thousands)	Net Pension Liability/(Asset)	Net Pension Liability/(Asset)	Net Pension Liability/(Asset)
		1% Decrease (5.85%)	Current Discount Rate (6.85%)	1% Increase (7.85%)
Noncontributory Retirement System	\$	6,742,745	2,328,799	(1,363,844)
Contributory Retirement System		134,674	22,430	(73,670)
Public Safety Retirement System		1,049,307	346,265	(228,353)
Firefighters Retirement System		59,814	(151,840)	(325,193)
Judges Retirement System		68,698	35,268	6,909
Utah Governors and Legislative Retirement Plan		2,265	1,044	(1)
Tier 2 Public Employees Contributory Retirement System		475,787	108,889	(173,759)
Tier 2 Public Safety and Firefighters Contributory Retirement System		66,779	8,342	(38,101)
Totals	\$	8,600,069	2,699,197	(2,196,012)

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Contribution Rates

December 31, 2022

System	Contribution Rates as a Percent of Covered Payroll		
	Member	Employer	Other
Noncontributory Retirement System	—	17.97-22.19 %	—
Contributory Retirement System	6.00 %	13.96-17.70	—
Public Safety Retirement System:			
Noncontributory	—	32.28-50.38	—
Contributory	10.50-12.29	22.79-27.98	—
Firefighters Retirement System:			
Division A	15.05	3.61	11.06 %
Division B	16.71	6.24	11.06
Judges Retirement System	—	44.76	7.15
Governors and Legislators Retirement Plan	—	\$ 359,939	—
Tier 2 Public Employees Contributory Retirement System	—	16.19-20.02 %	—
Tier 2 Public Safety and Firefighter Contributory Retirement System	2.59	14.08-40.97	—

Required Contributions

(dollars in thousands)

System	Contribution Requirements						
	Normal Cost	Unfunded Cost	Total Required Contributions	Total Actual Contributions	Member Contributions Made	Employer Contributions Made	
Noncontributory Retirement System	\$ 667,093	318,244	985,337	985,337	15,415	969,922	
Contributory Retirement System	2,833	2,082	4,915	4,915	1,240	3,675	
Public Safety Retirement System	115,376	54,196	169,572	169,572	1,037	168,535	
Firefighters Retirement System	48,480	—	48,480	48,480	19,269	29,211	
Judges Retirement System	7,931	2,782	10,713	10,713	—	10,713	
Governors & Legislators Retirement Plan	422	—	422	422	—	422	
Tier 2 Public Employees Contributory Retirement System	217,343	—	217,343	217,343	164	217,179	
Tier 2 Public Safety and Firefighter Contributory Retirement System	51,658	—	51,658	51,658	7,386	44,272	
Total	\$ 1,111,136	377,304	1,488,440	1,488,440	44,511	1,443,929	

Note 6

Employer Contribution Requirements

The top schedule above summarizes contribution rates in effect as of December 31, 2022. Contributions made by employers and members were in accordance with actuarially computed funding requirements. Fire insurance premium taxes and court fees are considered as part of employer contributions in the schedule shown above for the Firefighters and Judges Systems, respectively.

These contribution rates also include rates for a 3% benefit enhancement that is funded by the State. For contribution rate purposes the actuary evaluates the assets of the Systems based on a 5-year smoothed expected return wherein 20% of a year's excess or shortfall of expected return is recognized each year for five years.

The actual contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Information with regard to contributions to the Systems, for the year ended December 31, 2022, is indicated in the schedules shown below and on page 81.

Member contributions in the 401(k), 457(b), Roth and Traditional IRAs, total \$532,075,000, that in combination with the member contributions made in the Retirement Systems total \$576,586,000.

Note 7 Transfer To and From Affiliated Systems

Asset transfers to or from affiliated systems are for the purpose of spreading employer contribution costs across same employer and same class of employee group and to record transfers of benefits and corresponding assets where employees transfer from one system to another. Benefit transfers usually are between contributory and noncontributory systems as allowed during authorized transfer windows established by statute or as otherwise authorized.

Note 8 Supplemental Benefits

In the past, the Utah State legislature appropriated funds as supplemental retirement benefits to be paid to qualified participants who have previously retired under the Contributory System. These benefits, already granted, are now and will continue to be funded through contribution rates unless otherwise provided by the legislature.

Note 9 Litigation

The Systems and Plans are involved in various claims and legal actions arising in the ordinary course of business. In the opinion of management and legal counsel, the ultimate disposition of these matters will not have a material adverse effect on the Systems' and Plans' financial position as a whole.

Note 10 Commitments

As of December 31, 2022, the Systems had committed to fund certain private equity partnerships, absolute return, and real asset funds projects for an amount of \$10.0 billion. Funding of \$6.7 billion had been provided by December 31, 2022, leaving an unfunded commitment of \$3.3 billion as of December 31, 2022.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

Note 11 Pension Plan Participation

Defined Benefit Plans

Utah Retirement Systems (URS) contributes to the State and School Noncontributory Retirement System, a cost-sharing multiple-employer defined benefit pension plan administered by Utah Retirement Systems (Systems). The Systems provide refunds, retirement benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries in accordance with retirement statutes. Utah Retirement Systems' is also considered a component unit and is allocated a portion of the net pension liability/(asset) and pension expense of the State and School Noncontributory Retirement System and the Tier 2 Public Employees Retirement System. As a component unit, the liability and cost associated with Utah Retirement Systems' employees earning benefits in the respective system are valued with all other members, and therefore, Utah Retirement System are allocated a portion of the net pension liability and pension expense of these cost-sharing systems. Please refer to the GASB 68 Schedules of Employer Allocations and Pension Reporting Section of this annual report for the financial reporting and disclosure information as required by GASB Statement No. 68 with respect to the Utah Retirement System.

The Systems are established and governed by the respective sections of Chapter 49 of the Utah Code Annotated 1953 as amended. The Utah State Retirement Act in Chapter 49 provides for the administration of the Utah Retirement Systems and Plans under the direction of the Utah State Retirement Board (Board) whose members are appointed by the governor. The Systems issue a publicly available financial report that includes financial statements and required supplementary information for the State and School Noncontributory Retirement System and the Tier 2 Public Employees Contributory Retirement System. A copy of the report may be obtained by writing to the Utah Retirement Systems, 560 East 200 South, Salt Lake City, UT 84102-2044 or by calling 1-800-365-8772. Funding Policy: In the State and School Noncontributory Retirement System and the Tier 2 Public Employees Retirement System, Utah Retirement Systems is required to contribute 22.19% and 20.02% of its annual covered salary, respectively. The contribution rates are the actuarially determined rates. The contributions were equal to the requirements of the Systems, are authorized by statute, and specified by the Board.

Utah Retirement Systems' contributions to the State and School Noncontributory Retirement System for the years ended December 31, 2022, 2021, and 2020, were \$3,031,894, \$2,863,573, and \$3,021,405, respectively.

The contributions were equal to the required contributions for each year.

Employees hired beginning July 1, 2011, are automatically enrolled in the Tier 2 Public Employees Retirement System. The Utah Retirement Systems' contributions to the Tier 2 Public Employees Retirement Systems for years ended December 31, 2022, 2021, and 2020, were \$1,153,760, \$905,097 and \$839,373, respectively. The contributions were equal to the required contributions for each year.

Defined Contribution Plans

Utah Retirement Systems also participates in four defined contribution plans, the 401(k), 457(b), Roth and Traditional IRAs.

401(k) Plan

Utah Retirement Systems offers its employees a 401(k) Plan to supplement retirement benefits accrued by participants in the Systems and may also be used as a primary retirement benefit. Employees covered by the State and School Noncontributory Retirement System have a contribution of 1.5% of covered salaries automatically made by Utah Retirement Systems. In addition, URS will match up to 2% and \$26 of employee contributions each pay period. Employees participating in the Systems can make additional contributions through payroll deduction to the 401(k) Plan up to specified limits. Contributions and earnings may be withdrawn by the employee upon termination or may be used as supplemental income during retirement. The employer 401(k) contributions for the years ended December 31, 2022, 2021, and 2020, were \$1,905,374, \$1,785,957, and \$1,688,217, respectively; the employee contributions for the years ended December 31, 2022, 2021, and 2020, were \$1,341,603, \$1,251,331, and \$1,150,635, respectively. The 401(k) Plan funds are fully vested to the participants at the time of deposit except for employer required contributions and earnings for Tier 2. Plan assets are administered and held by Utah Retirement Systems.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



457(b) Plan

Utah Retirement Systems also offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all employees, permits them to defer a portion of their salary until future years. Employees are eligible to voluntarily participate from the date of employment and are vested immediately upon participating. Employee contributions to the Section 457(b) Plan for the years ended December 31, 2022, 2021, and 2020, were \$615,885, \$534,614 and \$571,709, respectively.

Roth and Traditional IRAs

Utah Retirement Systems offers its employees two payroll deducted IRAs authorized by section 408 of the Internal Revenue Code. Employees are eligible to participate from the date of employment and are vested immediately upon participating. For the years ended December 31, 2022, 2021, and 2020, the Roth IRA employee contributions were \$279,210, \$303,012, and \$289,617, respectively. For the years ended December 31, 2022, 2021, and 2020, the traditional IRA employee contributions were \$16,591, \$10,551, and \$6,896, respectively.

Note 12 Post-Employment Healthcare Plan

The Utah Retirement Office contributes to a noncontributory defined benefit post-employment healthcare plan to provide post-employment insurance benefits for retired employees of the Utah Retirement Office. This plan was established in 2005. The Utah Retirement Employees Post-Employment Healthcare Plan, (UREPEHP), is an agent multiple-employer post-employment healthcare plan administered by the Utah Retirement Office.

For purposes of measuring the net OPEB liability/ (asset), deferred outflows/inflows of resources and expenses, information about the fiduciary net positions of the Other Postemployment Benefit Plan and additions to/deductions from the Plans' fiduciary net positions have been determined on the same basis as they are reported by the Plans. For this purpose, the Plans recognize benefit payments when due and payable in accordance with the benefit terms. OPEB investments for the Plans are reported at fair value.

Membership

(as in January 1, 2021, the last actuarial valuation date)

Number of retirees	46
Inactive, nonretired	—
Active members	66
Total membership	112

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022

Assets and liabilities of the plan are identified separately for each employer. Plan assets may be used only for the payment of benefits to the members of that system, in accordance with the terms of the plan. UREPEHP issues a publicly available financial report that includes financial statements and required supplementary information for UREPEHP. A copy of the report may be obtained by writing the Utah Retirement office, 560 East 200 South, Salt Lake City, UT 84102-2044 or by calling 1-800-365-8772.

Net OPEB Liability/(Asset)

The net OPEB asset was measured as of December 31, 2022. The total OPEB liability, used to calculate the net OPEB liability/(asset), was determined by an actuarial valuation as of January 1, 2021 and rolled-forward using generally accepted actuarial procedures. The combined total net OPEB asset is \$69.1 thousand. On pages 86 and 87 are the changes in the net OPEB liability/(asset) and related ratios of the net OPEB liability/(asset).

Net OPEB Liability/(Asset)

Total OPEB Liability	\$ 6,231,068
Plan Fiduciary Net Position	6,300,137
Net OPEB Liability/(Asset)	\$ (69,069)
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	101.11%
Net OPEB Liability/(Asset) as a Percentage of Covered Payroll	(1.05)%

The actuarial valuation was performed as of January 1, 2021. Update procedures were used to roll forward the total OPEB liability to December 31, 2022. All assumptions and methods used to develop the December 31, 2022, total OPEB liability are identical to those used in the January 1, 2021, actuarial valuation.

Summary of Actuarial Assumptions

Actuarial Cost Method	Individual Entry Age Normal
Discount Rate	6.85%, net of OPEB plan investment expense, including inflation
Inflation	2.50%
Salary Increases	3.25% to 8.5%, including inflation
Demographic Assumptions	The demographic assumptions were based on the experience study covering the five year period ending December 31, 2019 as conducted for the Utah Retirement Systems (URS).
Mortality Assumptions	Male retirees: 110% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 110% of 2020 PR UTAH Retiree Mortality Table for females projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020.
Participation Rates	All eligible members are assumed to convert all unused sick leave into health coverage at retirement.
Health Care Trend Rates	Pre-65: Initial trend rate of 6.80% in 2022, decreasing to an ultimate of 4.00% over 13 years. Post-65: Initial trend rate of 6.30% in 2021, decreasing to an ultimate of 4.00% over 14 years.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear*

Fiscal Year Ending December 31

	2022	2021	2020
Total OPEB Liability			
Service cost	\$ 37,104	33,880	33,886
Interest on the total OPEB liability	414,726	324,355	335,030
Changes of benefit terms	—	—	—
Difference between expected and actual experience	—	1,565,325	113,234
Changes of assumptions	36,280	43,107	(114,455)
Benefit payments	(585,762)	(575,985)	(466,576)
Net change in total OPEB liability	(97,652)	1,390,682	(98,881)
Total OPEB liability - beginning	6,328,720	4,938,038	5,036,919
Total OPEB liability - ending (a)	\$ 6,231,068	6,328,720	4,938,038
Plan Fiduciary Net Position			
Employer contributions	\$ —	—	—
Employee contributions	—	—	—
OPEB plan net investment income	(372,676)	1,130,967	788,499
Benefit payments	(585,762)	(575,985)	(466,576)
OPEB plan administrative expense	(15,199)	(22,276)	(15,106)
Other	—	—	—
Net change in plan fiduciary net position	(973,637)	532,706	306,817
Plan fiduciary net position - beginning	7,273,774	6,741,068	6,434,251
Plan fiduciary net position - ending (b)	6,300,137	7,273,774	6,741,068
Net OPEB liability/(asset) - ending (a) - (b)	\$ (69,069)	(945,054)	(1,803,030)
Plan fiduciary net position as a percentage of total OPEB liability	101.11%	114.93%	136.51%
Covered payroll	\$ 6,565,506	6,565,506	7,404,513
Net OPEB liability as a percentage of covered payroll	(1.05)%	(14.39)%	(24.35)%

*Additional years will be displayed as they become available.

Single Discount Rate

A Single Discount Rate of 6.85% was used to measure the total OPEB liability. This Single Discount Rate was based on the expected rate of return on OPEB plan investments of 6.85%. The funding policy is to pay the recommended actuarially determined contribution, which is based on a maximum 20-year amortization period. For both funds, the Fiduciary Net Position currently exceeds the total OPEB liability. As a result, the OPEB plan's fiduciary net position is expected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Target Allocations

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Systems target asset allocation as of December 31, 2022, are summarized in the table on page 88.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

2019	2018	2017
36,184	35,009	36,798
407,198	402,338	393,103
—	—	—
(1,043,159)	15,944	68,615
—	—	—
(408,363)	(359,523)	(369,968)
(1,008,140)	93,768	128,548
6,045,059	5,951,291	5,822,743
5,036,919	6,045,059	5,951,291
—	—	—
—	—	—
832,923	(23,149)	781,412
(408,363)	(359,523)	(369,968)
(25,269)	(2,482)	—
—	—	—
399,291	(385,154)	411,444
6,034,960	6,420,114	6,008,670
6,434,251	6,034,960	6,420,114
(1,397,332)	10,099	(468,823)
127.74%	99.83%	107.88%
7,404,513	7,897,200	7,897,200
(18.87)%	0.13 %	(5.94)%



Target Allocations

Asset Class	Expected Return Arithmetic Basis		
	Target Asset Allocation	Real Return Arithmetic Basis	Long-term Expected Portfolio Real Rate of Return*
Equity securities	35%	6.58%	2.30%
Debt securities	20	1.08	0.22
Real assets	18	5.72	1.03
Private equity	12	9.80	1.18
Absolute return	15	2.91	0.44
Cash and cash equivalents	0	(0.11)	0.00
Totals	100%		5.17%
Inflation			2.50
Expected arithmetic nominal return			7.67%

*The total URS Defined Benefit long-term expected rate of return is 6.85%, which is comprised of a 2.50% inflation assumption and a 4.35% net real rate of return.

Notes to the Basic Financial Statements (Continued)

December 31, 2022

Schedule of Contributions Multiyear
Last 10 Fiscal Years

FY Ending December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2013	\$ 285	285	—	7,189	3.96%
2014	285	285	—	6,955	4.10
2015	—	—	—	7,841	0.00
2016	—	—	—	7,647	0.00
2017	—	—	—	7,897	0.00
2018	—	—	—	7,897	0.00
2019	—	—	—	7,404	0.00
2020	—	—	—	7,404	0.00
2021	—	—	—	6,566	0.00
2022	—	—	—	6,566	0.00

Notes to the Schedule of Contributions

Valuation Date: 1/1/2021**Methods and Assumptions Used to Determine Contribution Rates:**

Material Cost Method	Individual Entry Age Normal
Amortization Method	Level Dollar Contributions
Remaining Amortization Period	20 years, maximum
Asset Valuation Method	5-year smoothed
Investment Rate of Return	6.85%, net of OPEB plan investment expense, including inflation
Inflation	2.50%
Salary Increases	3.25% to 8.50%, including inflation
Demographic	The demographic assumptions were based on the experience study covering experience through December 31, 2019 as conducted for the Utah Retirement Systems (URS).
Mortality Assumptions	Male retirees: 110% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 110% of 2020 PR UTAH Retiree Mortality Table for females, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020
Participation Rates	All eligible members are assumed to convert all unused sick leave into health coverage at retirement.
Health Care Trend Rates	Pre-65: Initial trend rate of 6.80% in 2022, decreasing to an ultimate of 4.00% over 13 years. Post-65: Initial trend rate of 6.30% in 2021, decreasing to an ultimate of 4.00% over 14 years.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



Funding Policy

The contribution requirements of Utah Retirement Employees Post-Employment Healthcare Plan are determined by the Plan and approved by the Board. Utah Retirement Office is required to contribute the annual required contribution (ARC), an actuarially determined rate. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over an open 20-year period using the level dollar amount. The current dollar amount is \$0 since the funded ratio as of the most recent actuarial valuation, January 1, 2021, was over 100% and the plan is closed to new participants.

Required Contributions

For the year ended December 31, 2022, the annual cost (expense) of \$0 for UREPEHP was equal to the ARC. The net Other Post-Employment Benefits (OPEB) obligation for 2022 was as shown on top left of page 88.

Frequency and Timing of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the OPEB plan's fiscal year end. If update procedures are used to roll forward the total OPEB liability, the date of the actuarial valuation must be no more than 24 months earlier than the OPEB plan's most recent fiscal year-end.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of January 1, 2021, and a measurement date of December 31, 2022.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 6.85%; the municipal bond rate is 2.00% (based on the daily rate closest to but not later than the measurement date of the Fidelity "20-Year Municipal GO AA Index"); and the resulting Single Discount Rate is 6.85%.

Sensitivity of Net OPEB Liability

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 6.85%, as well as what the plan's net OPEB liability would be if it were calculated using Single Discount Rate that is one percent lower or one percent higher:

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



Sensitivity of Net OPEB Liability to a Single Discount Rate Assumption

1% Decrease 5.85%	Current Single Discount Rate Assumption 6.85%	1% Increase 7.85%
\$326,729	\$(69,069)	\$(431,911)

Regarding the sensitivity of the net OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption

1% Decrease	Cost Trend Rate Assumption	1% Increase
\$(547,292)	\$(69,069)	\$458,624

Note 13 Compensated Absences and Insurance Reserve

The compensated absences liability for Utah Retirement Office employees at December 31, 2022, was \$7,886,000. This represents the amount of unused leave to be paid to employees upon termination. At December 31, 2022, the insurance reserve was \$5,672,000. The insurance reserve coverage is explained in Note 15, Risk Management.

Note 14 Required Supplementary Information

Required supplementary information is included immediately following the notes to the financial statements on pages 92 through 176. Other supplementary information presented in succeeding sections of this report is for the benefit of statement users and is not a required part of the basic financial statements.

Note 15 Risk Management

Most risks of loss to which the Systems, Plans, and Investment Fund are exposed, other than routine investment losses, are covered under commercial insurance policies. Risks in excess of coverage limits or large deductible, and otherwise uninsured losses, are retained by the Systems, Plans or Investment Fund through the insurance reserve. There have been no reductions of insurance coverage from coverages of the previous year in any of the categories of risk. Coverages are increased or decreased commensurate with real estate acquisitions or dispositions. During the past three calendar years, no loss settlements exceeded insurance coverages beyond immaterial deductible amounts. The insurance reserve was established by the Board from investment earnings as authorized by statute.

Notes to the Basic Financial Statements *(Continued)*

December 31, 2022



Note 16 Real Estate Liabilities

The real estate liability consists of one line of credit. This note bears interest at One Month Secured Overnight Financing Rate (SOFR) + 0.25 and contains an annual renewal option. As of December 31, 2022, there is \$100 million in credit facility debt. In addition, there is a \$20 million unused commitment. Using interest rates as of December 31, 2022, principal, interest requirements of the debt payments is shown below.

Real Estate Liabilities

(in thousands)

	Initial Affected Balance	Maturity Date	Annual Payment
Northern Trust	\$ 100,000	7/30/2023	\$ 100,000
	Year Ending December 31,	Total Principal Payments	Total Interest Payments
	2023	\$ 100,000	2,679
			Fee Payment
			N/A

Loan interest payment is calculated using One Months SOFR rate at December 31, 2022.

Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability

Year Ended December 31

(in thousands)

Noncontributory Retirement System	2022	2021	2020
Total pension liability			
Service cost	\$ 422,530	410,799	402,446
Interest	2,256,737	2,167,432	2,071,626
Benefit changes	—	—	—
Differences between expected and actual experience	351,279	404,505	252,553
Assumption changes	—	386,554	176,384
Benefit payments	(1,662,640)	(1,565,046)	(1,488,627)
Refunds	(3,334)	(1,313)	(2,338)
Net change in total pension liability	1,364,572	1,802,931	1,412,044
Total pension liability — beginning	33,566,790	31,763,859	30,351,815
Total pension liability — ending (a)	34,931,362	33,566,790	31,763,859
Plan fiduciary net position			
Contributions — member	15,415	16,178	16,385
Contributions — employer	969,922	942,910	912,525
Net investment income	(1,833,570)	5,201,752	3,430,989
Benefit payments	(1,662,640)	(1,565,046)	(1,488,627)
Refunds	(3,334)	(1,313)	(2,338)
Administrative expense	(10,357)	(10,004)	(9,805)
Net transfers with affiliated systems	58,592	5,986	(16,980)
Net change in plan fiduciary net position	(2,465,972)	4,590,463	2,842,149
Plan fiduciary net position — beginning	35,068,535	30,478,072	27,635,923
Plan fiduciary net position — ending (b)	32,602,563	35,068,535	30,478,072
Net pension liability/(asset) — ending (a-b)	\$ 2,328,799	(1,501,745)	1,285,787
Plan fiduciary net position as a percentage of the total pension liability	93.3%	104.5%	96.0%
Projected covered payroll	\$ 3,360,198	3,361,940	3,306,382
Net pension liability/(asset) as a percentage of covered payroll	69.3%	(44.7)%	38.9%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Noncontributory Retirement System						
2019	2018	2017	2016	2015	2014	2013
404,539	404,391	403,981	407,690	394,798	407,992	441,320
1,989,449	1,920,238	1,877,576	1,764,653	1,775,819	1,699,693	1,646,213
—	—	—	48,400	—	—	23,123
234,989	32,680	(84,234)	6,408	(188,166)	(204,823)	(208,501)
—	—	642,187	563,741	—	(157,921)	—
(1,396,983)	(1,320,214)	(1,248,037)	(1,184,317)	(1,123,647)	(1,043,798)	(974,684)
(3,127)	(2,766)	(4,635)	(4,366)	(2,496)	(2,204)	(2,454)
1,228,867	1,034,329	1,586,838	1,602,209	856,308	698,939	925,017
29,122,948	28,088,619	26,501,781	24,899,572	24,043,264	23,344,325	22,419,308
30,351,815	29,122,948	28,088,619	26,501,781	24,899,572	24,043,264	23,344,325
11,730	14,602	17,285	16,308	17,020	13,587	14,208
888,078	858,444	854,255	831,631	813,449	772,420	710,933
3,499,188	(92,207)	2,987,282	1,783,911	366,748	1,419,053	2,588,981
(1,396,983)	(1,320,214)	(1,248,037)	(1,184,317)	(1,123,647)	(1,043,798)	(974,684)
(3,127)	(2,766)	(4,635)	(4,366)	(2,496)	(2,204)	(2,454)
(9,411)	(9,962)	(9,579)	(8,856)	(8,797)	(8,828)	(8,329)
(19,611)	13,035	(10,187)	(8,005)	33,648	30,467	(42,277)
2,969,864	(539,068)	2,586,384	1,426,306	95,925	1,180,697	2,286,378
24,666,059	25,205,127	22,618,743	21,192,437	21,096,512	19,915,815	17,629,437
27,635,923	24,666,059	25,205,127	22,618,743	21,192,437	21,096,512	19,915,815
2,715,892	4,456,889	2,883,492	3,883,038	3,707,135	2,946,752	3,428,510
91.1%	84.7%	89.7%	85.3%	85.1%	87.7%	85.3%
3,328,314	3,330,548	3,375,321	3,406,567	3,458,286	3,570,912	3,705,771
81.6%	133.8%	85.4%	114.0%	107.2%	82.5%	92.5%

Continued on page 94.

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Changes in the
Employers' Net Pension Liability (Continued)

Year Ended December 31

	(in thousands)		
Contributory Retirement System	2022	2021	2020
Total pension liability			
Service cost	\$ 2,433	2,786	3,175
Interest	82,901	85,305	85,198
Benefit changes	—	—	—
Differences between expected and actual experience	(7,940)	(21,487)	(5,463)
Assumption changes	—	10,667	11,312
Benefit payments	(94,365)	(91,712)	(89,890)
Refunds	(848)	(1,625)	(1,753)
Net change in total pension liability	(17,819)	(16,066)	2,579
Total pension liability — beginning	1,256,624	1,272,690	1,270,111
Total pension liability — ending (a)	1,238,805	1,256,624	1,272,690
Plan fiduciary net position			
Contributions — member	1,240	1,445	1,728
Contributions — employer	3,675	4,204	4,759
Net investment income	(70,701)	220,023	154,367
Benefit payments	(94,365)	(91,712)	(89,890)
Refunds	(848)	(1,625)	(1,753)
Administrative expense	(382)	(388)	(406)
Net transfers with affiliated systems	(69,481)	(20,349)	4,542
Net change in plan fiduciary net position	(230,862)	111,598	73,347
Plan fiduciary net position — beginning	1,447,237	1,335,639	1,262,292
Plan fiduciary net position — ending (b)	1,216,375	1,447,237	1,335,639
Net pension liability/(asset) — ending (a-b)	\$ 22,430	(190,613)	(62,949)
Plan fiduciary net position as a percentage of the total pension liability	98.2%	115.2%	104.9%
Projected covered payroll	\$ 26,521	26,782	30,748
Net pension liability/(asset) as a percentage of covered payroll	84.6%	(711.7)%	(204.7)%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Contributory Retirement System						
2019	2018	2017	2016	2015	2014	2013
3,536	4,044	4,801	5,673	8,672	9,580	10,997
86,205	87,297	90,124	91,894	95,463	93,819	93,750
—	—	—	(45,057)	—	—	721
(12,817)	(17,249)	(24,990)	(13,801)	(15,289)	(22,839)	(20,520)
—	—	22,108	22,909	—	(4,233)	—
(88,162)	(86,795)	(84,759)	(83,447)	(81,390)	(77,015)	(74,158)
(2,660)	(1,471)	(1,613)	(1,700)	(1,215)	(2,433)	(1,922)
(13,898)	(14,174)	5,671	(23,529)	6,241	(3,121)	8,868
1,284,009	1,298,183	1,292,512	1,316,041	1,309,800	1,312,921	1,304,053
1,270,111	1,284,009	1,298,183	1,292,512	1,316,041	1,309,800	1,312,921
1,950	2,455	2,675	3,420	4,771	5,461	6,376
5,433	6,027	7,946	8,188	11,719	12,954	12,874
163,935	(4,513)	155,949	97,693	21,251	87,577	169,510
(88,162)	(86,795)	(84,761)	(83,447)	(81,390)	(77,015)	(74,158)
(2,660)	(1,471)	(1,613)	(1,700)	(1,215)	(2,433)	(1,922)
(408)	(454)	(457)	(446)	(478)	(494)	(480)
9,775	(26,286)	(1,177)	(1,895)	(41,558)	(38,004)	33,094
89,863	(111,037)	78,562	21,813	(86,900)	(11,954)	145,294
1,172,429	1,283,466	1,204,904	1,183,091	1,269,991	1,281,945	1,136,651
1,262,292	1,172,429	1,283,466	1,204,904	1,183,091	1,269,991	1,281,945
7,819	111,580	14,717	87,608	132,950	39,809	30,976
99.4%	91.3%	98.9%	93.2%	89.9%	97.0%	97.6%
34,317	39,279	45,177	53,615	82,426	90,623	98,023
22.8%	284.1%	32.6%	163.4%	161.3%	43.9%	31.6%

Continued on page 96.

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Changes in the
Employers' Net Pension Liability (Continued)

Year Ended December 31

	(in thousands)		
Public Safety Retirement System	2022	2021	2020
Total pension liability			
Service cost	\$ 73,905	74,554	77,899
Interest	331,631	320,715	305,221
Benefit changes	—	—	—
Differences between expected and actual experience	26,698	8,677	72,199
Assumption changes	—	61,108	(6,165)
Benefit payments	(241,776)	(233,672)	(215,289)
Refunds	(552)	(32)	(96)
Net change in total pension liability	189,906	231,350	233,769
Total pension liability — beginning	4,925,534	4,694,184	4,460,415
Total pension liability — ending (a)	5,115,440	4,925,534	4,694,184
Plan fiduciary net position			
Contributions — member	1,037	1,421	557
Contributions — employer	168,535	152,524	150,512
Net investment income	(267,352)	756,145	496,725
Benefit payments	(241,776)	(233,672)	(215,289)
Refunds	(552)	(32)	(96)
Administrative expense	(1,513)	(1,466)	(1,442)
Net transfers with affiliated systems	5,403	7,956	7,364
Net change in plan fiduciary net position	(336,218)	682,876	438,331
Plan fiduciary net position — beginning	5,105,393	4,422,517	3,984,186
Plan fiduciary net position — ending (b)	4,769,175	5,105,393	4,422,517
Net pension liability/(asset) — ending (a-b)	\$ 346,265	(179,859)	271,667
Plan fiduciary net position as a percentage of the total pension liability	93.2%	103.7%	94.2%
Projected covered payroll	\$ 313,938	325,616	338,919
Net pension liability/(asset) as a percentage of covered payroll	110.3%	(55.2)%	80.2%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Public Safety Retirement System						
2019	2018	2017	2016	2015	2014	2013
78,229	80,296	78,272	78,843	75,352	76,681	81,736
291,647	280,149	269,818	249,722	248,980	236,803	229,965
—	—	—	—	—	—	—
34,291	1,441	(3,041)	9,358	(17,164)	(25,225)	(29,228)
—	—	118,370	110,373	—	(52,410)	—
(201,923)	(188,414)	(172,870)	(164,508)	(155,387)	(144,763)	(137,486)
(76)	(428)	(226)	(183)	(533)	(199)	(467)
202,168	173,044	290,323	283,605	151,248	90,887	144,520
4,258,247	4,085,203	3,794,880	3,511,275	3,360,027	3,269,140	3,124,620
4,460,415	4,258,247	4,085,203	3,794,880	3,511,275	3,360,027	3,269,140
856	895	793	830	905	835	1,258
150,467	147,101	145,814	147,099	141,024	135,588	128,744
502,657	(13,134)	421,917	249,027	50,654	194,222	350,563
(201,923)	(188,414)	(172,870)	(164,508)	(155,387)	(144,763)	(137,486)
(76)	(428)	(226)	(183)	(533)	(199)	(467)
(1,376)	(1,450)	(1,382)	(1,260)	(1,233)	(1,227)	(1,161)
5,512	6,982	5,926	6,701	4,023	2,746	4,676
456,117	(48,448)	399,972	237,706	39,453	187,202	346,127
3,528,069	3,576,517	3,176,545	2,938,839	2,899,386	2,712,184	2,366,057
3,984,186	3,528,069	3,576,517	3,176,545	2,938,839	2,899,386	2,712,184
476,229	730,178	508,686	618,335	572,436	460,641	556,956
89.3%	82.9%	87.5%	83.7%	83.7%	86.3%	83.0%
339,705	348,475	350,782	352,407	355,171	360,750	365,998
140.2%	209.5%	145.0%	175.5%	161.2%	127.7%	152.2%

Continued on page 98.

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Changes in the
Employers' Net Pension Liability (Continued)

Year Ended December 31

	(in thousands)		
Firefighters Retirement System	2022	2021	2020
Total pension liability			
Service cost	\$ 30,033	29,351	29,553
Interest	99,323	95,203	90,343
Benefit changes	—	—	—
Differences between expected and actual experience	4,788	5,996	8,829
Assumption changes	—	18,286	6,153
Benefit payments	(71,019)	(66,508)	(62,842)
Refunds	(370)	(176)	(159)
Net change in total pension liability	62,755	82,152	71,877
Total pension liability — beginning	1,470,649	1,388,497	1,316,620
Total pension liability — ending (a)	1,533,404	1,470,649	1,388,497
Plan fiduciary net position			
Contributions — member	19,269	18,985	18,729
Contributions — employer	6,473	7,499	7,490
Court fees and fire insurance premium tax	22,738	21,136	20,279
Net investment income	(94,373)	265,931	173,818
Benefit payments	(71,019)	(66,508)	(62,842)
Refunds	(370)	(176)	(159)
Administrative expense	(451)	(435)	(425)
Net transfers with affiliated systems	3,513	1,837	2,751
Net change in plan fiduciary net position	(114,220)	248,269	159,641
Plan fiduciary net position — beginning	1,799,463	1,551,194	1,391,553
Plan fiduciary net position — ending (b)	1,685,243	1,799,463	1,551,194
Net pension liability/(asset) — ending (a-b)	\$ (151,839)	(328,814)	(162,697)
Plan fiduciary net position as a percentage of the total pension liability	109.9%	122.4%	111.7%
Projected covered payroll	\$ 114,702	114,635	114,458
Net pension liability/(asset) as a percentage of covered payroll	(132.4)%	(286.8)%	(142.1)%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Firefighters Retirement System						
2019	2018	2017	2016	2015	2014	2013
29,281	29,378	28,775	28,652	27,182	27,266	29,577
86,589	82,819	80,386	75,334	75,212	71,490	70,259
—	—	—	—	—	—	—
(437)	937	(9,216)	(5,525)	(8,259)	(15,077)	(13,083)
—	—	31,357	25,572	—	(20,372)	—
(59,847)	(57,440)	(54,793)	(52,102)	(49,671)	(47,710)	(44,747)
(255)	(132)	(511)	(466)	(528)	(293)	(106)
55,331	55,562	75,998	71,465	43,936	15,304	41,900
1,261,289	1,205,727	1,129,729	1,058,264	1,014,328	999,024	957,124
1,316,620	1,261,289	1,205,727	1,129,729	1,058,264	1,014,328	999,024
18,701	18,305	18,460	18,729	18,175	18,300	18,325
7,443	7,021	6,715	6,954	6,690	5,514	3,494
41,859	8,747	1,223	10,569	17,218	14,154	11,285
174,141	(4,509)	146,736	87,746	17,934	69,070	125,685
(59,847)	(57,440)	(54,793)	(52,102)	(49,671)	(47,710)	(44,747)
(255)	(132)	(511)	(466)	(528)	(293)	(106)
(405)	(427)	(408)	(374)	(371)	(370)	(355)
2,027	1,917	1,259	1,611	2,573	3,713	1,302
183,664	(26,518)	118,681	72,667	12,020	62,378	114,883
1,207,889	1,234,407	1,115,726	1,043,059	1,031,039	968,661	853,778
1,391,553	1,207,889	1,234,407	1,115,726	1,043,059	1,031,039	968,661
(74,933)	53,400	(28,680)	14,003	15,205	(16,711)	30,363
105.7%	95.8%	102.4%	98.8%	98.6%	101.6%	97.0%
113,330	113,587	112,953	112,322	111,133	111,305	110,741
(66.1)%	47.0%	(25.4)%	12.5%	13.7%	(15.0)%	27.4%

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Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Changes in the
Employers' Net Pension Liability (Continued)

Year Ended December 31

	(in thousands)		
Judges Retirement System	2022	2021	2020
Total pension liability			
Service cost	\$ 6,667	6,309	6,144
Interest	19,008	18,415	17,675
Benefit changes	—	—	—
Differences between expected and actual experience	6,552	2,789	548
Assumption changes	—	2,928	3,431
Benefit payments	(17,609)	(18,600)	(15,863)
Refunds	—	—	—
Net change in total pension liability	14,618	11,841	11,935
Total pension liability — beginning	282,957	271,116	259,181
Total pension liability — ending (a)	297,575	282,957	271,116
Plan fiduciary net position			
Contributions — member	—	—	—
Contributions — employer	9,378	8,949	8,646
Court fees and fire insurance premium tax	1,335	1,354	1,410
Net investment income	(14,729)	41,716	27,391
Benefit payments	(17,609)	(18,600)	(15,863)
Refunds	—	—	—
Administrative expense	(88)	(85)	(84)
Net transfers with affiliated systems	1,990	4,563	2,340
Net change in plan fiduciary net position	(19,723)	37,897	23,840
Plan fiduciary net position — beginning	282,030	244,133	220,293
Plan fiduciary net position — ending (b)	262,307	282,030	244,133
Net pension liability/(asset) — ending (a-b)	\$ 35,268	927	26,983
Plan fiduciary net position as a percentage of the total pension liability	88.1%	99.7%	90.0%
Projected covered payroll	\$ 21,202	20,801	20,071
Net pension liability/(asset) as a percentage of covered payroll	166.3%	4.5%	134.4%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Judges Retirement System						
2019	2018	2017	2016	2015	2014	2013
6,054	5,682	5,325	5,023	4,794	4,895	4,537
16,649	15,697	14,866	14,064	14,136	13,641	12,924
—	—	—	—	—	—	—
7,615	7,872	809	1,995	171	2,602	(569)
—	—	13,067	2,885	—	(130)	—
(15,346)	(16,111)	(13,621)	(12,330)	(12,400)	(11,361)	(10,189)
—	—	—	—	—	—	—
14,972	13,140	20,446	11,637	6,701	9,647	6,703
244,209	231,069	210,623	198,986	192,285	182,638	175,935
259,181	244,209	231,069	210,623	198,986	192,285	182,638
—	—	—	—	—	317	—
8,500	8,091	7,563	7,382	6,555	5,627	4,990
1,536	1,518	1,477	1,470	1,653	1,486	1,498
27,775	(730)	23,435	13,820	2,842	11,068	20,130
(15,346)	(16,111)	(13,621)	(12,330)	(12,400)	(11,361)	(10,189)
—	—	—	—	—	—	—
(81)	(84)	(79)	(71)	(71)	(71)	(66)
2,339	4,403	4,090	1,600	1,334	1,092	3,186
24,723	(2,913)	22,865	11,871	(87)	8,158	19,549
195,570	198,483	175,618	163,747	163,834	155,676	136,127
220,293	195,570	198,483	175,618	163,747	163,834	155,676
38,888	48,639	32,586	35,005	35,239	28,451	26,962
85.0%	80.1%	85.9%	83.4%	82.3%	85.2%	85.2%
19,596	18,802	18,661	16,755	15,832	16,072	15,195
198.4%	258.7%	174.6%	208.9%	222.6%	177.0%	177.4%

Continued on page 102.

Utah Retirement Systems
Required Supplementary Information *(Continued)*
Schedule of Changes in the
Employers' Net Pension Liability *(Continued)*

Year Ended December 31

	<i>(in thousands)</i>		
Utah Governors and Legislators Retirement Plan	2022	2021	2020
Total pension liability			
Service cost	\$ 52	46	104
Interest	872	892	875
Benefit changes	—	—	—
Differences between expected and actual experience	50	(144)	224
Assumption changes	—	114	107
Benefit payments	(1,010)	(1,036)	(1,023)
Refunds	—	—	(10)
Net change in total pension liability	(36)	(128)	277
Total pension liability — beginning	13,202	13,330	13,053
Total pension liability — ending (a)	13,166	13,202	13,330
Plan fiduciary net position			
Contributions — member	—	—	—
Contributions — employer	422	361	369
Court fees and fire insurance premium tax	—	—	—
Net investment income	(693)	2,042	1,396
Benefit payments	(1,010)	(1,036)	(1,023)
Refunds	—	—	(10)
Administrative expense	(4)	(4)	(4)
Net transfers with affiliated systems	(18)	7	(17)
Net change in plan fiduciary net position	(1,303)	1,370	711
Plan fiduciary net position — beginning	13,425	12,055	11,344
Plan fiduciary net position — ending (b)	12,122	13,425	12,055
Net pension liability/(asset) — ending (a-b)	\$ 1,044	(223)	1,275
Plan fiduciary net position as a percentage of the total pension liability	92.1%	101.7%	90.4%
Projected covered payroll	\$ 564	719	757
Net pension liability/(asset) as a percentage of covered payroll	185.1%	(31.0)%	168.4%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Utah Governors and Legislators Retirement Plan						
2019	2018	2017	2016	2015	2014	2013
59	65	68	89	99	106	100
883	877	879	851	890	884	860
—	—	—	—	—	—	—
(54)	139	182	167	(105)	307	(233)
—	—	264	241	—	—	—
(1,012)	(978)	(973)	(941)	(904)	(909)	(892)
—	—	—	—	—	—	—
(124)	103	420	407	(20)	388	(165)
13,177	13,074	12,654	12,247	12,267	11,879	12,044
13,053	13,177	13,074	12,654	12,247	12,267	11,879
—	—	—	—	—	—	—
384	392	404	421	421	411	252
—	—	—	—	—	—	—
1,481	(41)	1,353	849	181	717	1,346
(1,012)	(978)	(973)	(941)	(904)	(909)	(892)
—	—	—	—	—	—	—
(4)	(5)	(5)	(4)	(5)	(5)	(4)
(42)	(51)	89	(12)	(20)	(14)	19
807	(683)	868	313	(327)	200	721
10,537	11,220	10,352	10,039	10,366	10,166	9,445
11,344	10,537	11,220	10,352	10,039	10,366	10,166
1,709	2,640	1,854	2,302	2,208	1,901	1,713
86.9%	80.0%	85.8%	81.8%	82.0%	84.5%	85.6%
639	639	722	799	943	928	390
267.4%	413.1%	256.8%	288.1%	234.1%	204.8%	439.2%

Continued on page 104.

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Changes in the
Employers' Net Pension Liability (Continued)

Year Ended December 31

	(in thousands)		
Tier 2 Public Employees Contributory Retirement System	2022	2021	2020
Total pension liability			
Service cost	\$ 200,266	167,468	146,284
Interest	82,921	64,608	49,103
Benefit changes	—	—	—
Differences between expected and actual experience	19,941	9,348	8,201
Assumption changes	—	25,384	10,603
Benefit payments	(2,602)	(1,982)	(1,397)
Refunds	—	—	—
Net change in total pension liability	300,526	264,826	212,794
Total pension liability — beginning	1,111,694	846,868	634,074
Total pension liability — ending (a)	1,412,220	1,111,694	846,868
Plan fiduciary net position			
Contributions — member	164	57	—
Contributions — employer	217,179	168,232	138,466
Court fees and fire insurance premium tax	—	—	—
Net investment income	(65,084)	155,495	84,040
Benefit payments	(2,602)	(1,982)	(1,397)
Refunds	—	—	—
Administrative expense	(345)	(269)	(207)
Net transfers with affiliated systems	1	—	—
Net change in plan fiduciary net position	149,313	321,533	220,902
Plan fiduciary net position — beginning	1,154,018	832,485	611,583
Plan fiduciary net position — ending (b)	1,303,331	1,154,018	832,485
Net pension liability/(asset) — ending (a-b)	\$ 108,889	(42,324)	14,383
Plan fiduciary net position as a percentage of the total pension liability	92.3%	103.8%	98.3%
Projected covered payroll	\$ 2,099,223	1,810,502	1,609,102
Net pension liability/(asset) as a percentage of covered payroll	5.2%	(2.3)%	0.9%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Tier 2 Public Employees Contributory Retirement System						
2019	2018	2017	2016	2015	2014	2013
124,244	104,736	84,388	69,887	51,005	39,283	29,318
36,773	27,109	19,471	12,608	8,370	4,648	2,351
—	—	—	—	—	—	(119)
6,561	(1,727)	357	(1,917)	(4,982)	(4,577)	(4,459)
—	—	5,786	7,867	—	(1,385)	—
(965)	(692)	(417)	(316)	(333)	—	—
—	—	—	—	—	—	—
166,613	129,426	109,585	88,129	54,060	37,969	27,091
467,461	338,035	228,450	140,321	86,261	48,292	21,201
634,074	467,461	338,035	228,450	140,321	86,261	48,292
—	—	—	—	—	—	—
119,839	97,680	79,175	63,062	49,645	37,299	25,743
—	—	—	—	—	—	—
68,228	(1,454)	33,249	14,059	1,963	4,320	4,017
(965)	(692)	(417)	(316)	(333)	—	—
—	—	—	—	—	—	—
(152)	(119)	(82)	(51)	(30)	(16)	(6)
—	—	—	—	3	(2)	3
186,950	95,415	111,925	76,754	51,248	41,601	29,757
424,633	329,218	217,293	140,539	89,291	47,690	17,933
611,583	424,633	329,218	217,293	140,539	89,291	47,690
22,491	42,828	8,817	11,157	(218)	(3,030)	602
96.5%	90.8%	97.4%	95.1%	100.1%	103.5%	98.7%
1,380,488	1,171,543	996,965	822,196	637,560	492,882	353,227
1.6%	3.7%	0.9%	1.4%	— %	(0.6)%	0.2%

Continued on page 106.

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Changes in the
Employers' Net Pension Liability (Continued)

Year Ended December 31

	<i>(in thousands)</i>		
Tier 2 Public Safety and Firefighter Contributory Retirement System	2022	2021	2020
Total pension liability			
Service cost	\$ 42,714	35,061	29,998
Interest	13,626	10,200	7,350
Benefit changes	—	—	—
Differences between expected and actual experience	(2,131)	(880)	2,133
Assumption changes	—	3,983	(939)
Benefit payments	(42)	(37)	(76)
Refunds	(4)	—	—
Net change in total pension liability	54,163	48,327	38,466
Total pension liability — beginning	177,580	129,253	90,787
Total pension liability — ending (a)	231,743	177,580	129,253
Plan fiduciary net position			
Contributions — member	7,386	5,335	2,343
Contributions — employer	44,272	33,406	25,020
Court fees and fire insurance premium tax	—	—	—
Net investment income	(10,791)	23,686	11,645
Benefit payments	(42)	(37)	(76)
Refunds	(4)	—	—
Administrative expense	(54)	(40)	(29)
Net transfers with affiliated systems	—	—	—
Net change in plan fiduciary net position	40,767	62,350	38,903
Plan fiduciary net position — beginning	182,634	120,284	81,381
Plan fiduciary net position — ending (b)	223,401	182,634	120,284
Net pension liability/(asset) — ending (a-b)	\$ 8,342	(5,054)	8,969
Plan fiduciary net position as a percentage of the total pension liability	96.4%	102.8%	93.1%
Projected covered payroll	\$ 265,137	223,892	188,667
Net pension liability/(asset) as a percentage of covered payroll	3.1%	(2.3)%	4.8%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Tier 2 Public Safety and Firefighter Contributory Retirement System

2019	2018	2017	2016	2015	2014	2013
24,849	13,998	10,763	8,164	5,466	3,579	2,151
4,811	3,199	2,133	1,274	746	379	159
2,537	—	—	—	—	—	(7)
1,839	621	(2)	425	220	50	106
—	—	1,924	803	—	(127)	—
(90)	—	(61)	(28)	(30)	—	—
—	—	—	—	—	—	—
33,946	17,818	14,757	10,638	6,402	3,881	2,409
56,841	39,023	24,266	13,628	7,226	3,345	936
90,787	56,841	39,023	24,266	13,628	7,226	3,345
—	55	—	—	—	—	—
18,197	14,295	11,126	8,488	6,221	4,365	2,451
—	—	—	—	—	—	—
8,958	(180)	3,989	1,591	199	404	316
(90)	—	(61)	(28)	(30)	—	—
—	—	—	—	—	—	—
(20)	(14)	(9)	(5)	(3)	(1)	—
—	—	—	—	(3)	2	(3)
27,045	14,156	15,045	10,046	6,384	4,770	2,764
54,336	40,180	25,135	15,089	8,705	3,935	1,171
81,381	54,336	40,180	25,135	15,089	8,705	3,935
9,406	2,505	(1,157)	(869)	(1,461)	(1,479)	(590)
89.6%	95.6%	103.0%	103.6%	110.7%	120.5%	117.6%
156,778	123,439	98,113	74,834	53,276	35,019	20,215
6.0%	2.0%	(1.2)%	(1.2)%	(2.7)%	(4.2)%	(2.9)%

Continued on page 108.

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Changes in the
Employers' Net Pension Liability (Concluded)

Year Ended December 31

	(in thousands)		
Total All Retirement Systems	2022	2021	2020
Total pension liability			
Service cost	\$ 778,600	726,374	695,603
Interest	2,887,019	2,762,770	2,627,391
Benefit changes	—	—	—
Differences between expected and actual experience	399,237	408,804	339,224
Assumption changes	—	509,024	200,886
Benefit payments	(2,091,063)	(1,978,593)	(1,875,007)
Refunds	(5,108)	(3,146)	(4,356)
Net change in total pension liability	1,968,685	2,425,233	1,983,741
Total pension liability — beginning	42,805,030	40,379,797	38,396,056
Total pension liability — ending (a)	44,773,715	42,805,030	40,379,797
Plan fiduciary net position			
Contributions — member	44,511	43,421	39,742
Contributions — employer	1,419,856	1,318,085	1,247,787
Court fees and fire insurance premium tax	24,073	22,490	21,689
Net investment income	(2,357,293)	6,666,790	4,380,371
Benefit payments	(2,091,063)	(1,978,593)	(1,875,007)
Refunds	(5,108)	(3,146)	(4,356)
Administrative expense	(13,194)	(12,691)	(12,402)
Net transfers with affiliated systems	—	—	—
Net change in plan fiduciary net position	(2,978,218)	6,056,356	3,797,824
Plan fiduciary net position — beginning	45,052,735	38,996,379	35,198,555
Plan fiduciary net position — ending (b)	42,074,517	45,052,735	38,996,379
Net pension liability/(asset) — ending (a-b)	\$ 2,699,198	(2,247,705)	1,383,418
Plan fiduciary net position as a percentage of the total pension liability	94.0%	105.3%	96.6%
Projected covered payroll	\$ 6,201,485	5,884,887	5,609,104
Net pension liability/(asset) as a percentage of covered payroll	43.5%	(38.2)%	24.7%

Utah Retirement Systems
Required Supplementary Information *(Continued)*

Total All Retirement Systems						
2019	2018	2017	2016	2015	2014	2013
670,791	642,590	616,373	604,021	567,368	569,382	599,736
2,513,006	2,417,385	2,355,253	2,210,400	2,219,616	2,121,357	2,056,481
2,537	—	—	3,343	—	—	23,718
271,987	24,714	(120,133)	(2,890)	(233,574)	(269,582)	(276,487)
—	—	835,063	734,391	—	(236,578)	—
(1,764,328)	(1,670,644)	(1,575,533)	(1,497,989)	(1,423,762)	(1,325,556)	(1,242,156)
(6,118)	(4,797)	(6,985)	(6,715)	(4,772)	(5,129)	(4,949)
1,687,875	1,409,248	2,104,038	2,044,561	1,124,876	853,894	1,156,343
36,708,181	35,298,933	33,194,895	31,150,334	30,025,458	29,171,564	28,015,221
38,396,056	36,708,181	35,298,933	33,194,895	31,150,334	30,025,458	29,171,564
33,237	36,312	39,213	39,287	40,871	38,500	40,167
1,198,341	1,139,051	1,112,998	1,073,225	1,035,724	974,178	889,481
43,395	10,265	2,700	12,039	18,871	15,640	12,783
4,446,363	(116,768)	3,773,910	2,248,696	461,772	1,786,431	3,260,548
(1,764,328)	(1,670,644)	(1,575,533)	(1,497,989)	(1,423,762)	(1,325,556)	(1,242,156)
(6,118)	(4,797)	(6,985)	(6,715)	(4,772)	(5,129)	(4,949)
(11,857)	(12,515)	(12,001)	(11,067)	(10,988)	(11,012)	(10,401)
—	—	—	—	—	—	—
3,939,033	(619,096)	3,334,302	1,857,476	117,716	1,473,052	2,945,473
31,259,522	31,878,618	28,544,316	26,686,840	26,569,124	25,096,072	22,150,599
35,198,555	31,259,522	31,878,618	28,544,316	26,686,840	26,569,124	25,096,072
3,197,501	5,448,659	3,420,315	4,650,579	4,463,494	3,456,334	4,075,492
91.7%	85.2%	90.3%	86.0%	85.7%	88.5%	86.0%
5,373,167	5,146,312	4,998,694	4,839,495	4,714,627	4,678,491	4,669,560
59.5%	105.9%	68.4%	96.1%	94.7%	73.9%	87.3%

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedules of Employers' Net Pension Liability

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	(5) Projected Covered Payroll	(6) Net Pension Liability/ (Asset) as a Percentage of Covered Payroll
Noncontributory Retirement System	12/31/13	\$ 23,344,325	19,915,815	3,428,510	85.3%	\$ 3,705,771	92.5%
	12/31/14	24,043,264	21,096,512	2,946,752	87.7	3,570,912	82.5
	12/31/15	24,899,572	21,192,437	3,707,135	85.1	3,458,286	107.2
	12/31/16	26,501,781	22,618,743	3,883,038	85.3	3,406,567	114.0
	12/31/17	28,088,619	25,205,127	2,883,492	89.7	3,375,321	85.4
	12/31/18	29,122,948	24,666,059	4,456,889	84.7	3,330,548	133.8
	12/31/19	30,351,815	27,635,923	2,715,892	91.1	3,328,314	81.6
	12/31/20	31,763,859	30,478,072	1,285,787	96.0	3,306,382	38.9
	12/31/21	33,566,790	35,068,535	(1,501,745)	104.5	3,361,940	(44.7)
	12/31/22	34,931,362	32,602,563	2,328,799	93.3	3,360,198	69.3
Contributory Retirement System	12/31/13	\$ 1,312,921	1,281,945	30,976	97.6%	\$ 98,023	31.6%
	12/31/14	1,309,800	1,269,991	39,809	97.0	90,623	43.9
	12/31/15	1,316,041	1,183,091	132,950	89.9	82,426	161.3
	12/31/16	1,292,512	1,204,904	87,608	93.2	53,615	163.4
	12/31/17	1,298,183	1,283,466	14,717	98.9	45,177	32.6
	12/31/18	1,284,009	1,172,429	111,580	91.3	39,279	284.1
	12/31/19	1,270,111	1,262,292	7,819	99.4	34,317	22.8
	12/31/20	1,272,690	1,335,639	(62,949)	104.9	30,748	(204.7)
	12/31/21	1,256,624	1,447,237	(190,613)	115.2	26,782	(711.7)
	12/31/22	1,238,805	1,216,375	22,430	98.2	26,521	84.6
Public Safety Retirement System	12/31/13	\$ 3,269,140	2,712,184	556,956	83.0%	\$ 365,998	152.2%
	12/31/14	3,360,027	2,899,386	460,641	86.3	360,750	127.7
	12/31/15	3,511,275	2,938,839	572,436	83.7	355,171	161.2
	12/31/16	3,794,880	3,176,545	618,335	83.7	352,407	175.5
	12/31/17	4,085,203	3,576,517	508,686	87.5	350,782	145.0
	12/31/18	4,258,247	3,528,069	730,178	82.9	348,475	209.5
	12/31/19	4,460,415	3,984,186	476,229	89.3	339,705	140.2
	12/31/20	4,694,184	4,422,517	271,667	94.2	338,919	80.2
	12/31/21	4,925,534	5,105,393	(179,859)	103.7	325,616	(55.2)
	12/31/22	5,115,440	4,769,175	346,265	93.2	313,938	110.3
Firefighters Retirement System	12/31/13	\$ 999,024	968,661	30,363	97.0%	\$ 110,741	27.4%
	12/31/14	1,014,328	1,031,039	(16,711)	101.6	111,305	(15.0)
	12/31/15	1,058,264	1,043,059	15,205	98.6	111,133	13.7
	12/31/16	1,129,729	1,115,726	14,003	98.8	112,322	12.5
	12/31/17	1,205,727	1,234,407	(28,680)	102.4	112,953	(25.4)
	12/31/18	1,261,289	1,207,889	53,400	95.8	113,587	47.0
	12/31/19	1,316,620	1,391,553	(74,933)	105.7	113,330	(66.1)
	12/31/20	1,388,497	1,551,194	(162,697)	111.7	114,458	(142.1)
	12/31/21	1,470,649	1,799,463	(328,814)	122.4	114,635	(286.8)
	12/31/22	1,533,404	1,685,243	(151,839)	109.9	114,702	(132.4)
Judges Retirement System	12/31/13	\$ 182,638	155,676	26,962	85.2%	\$ 15,195	177.4%
	12/31/14	192,285	163,834	28,451	85.2	16,072	177.0
	12/31/15	198,986	163,747	35,239	82.3	15,832	222.6
	12/31/16	210,623	175,618	35,005	83.4	16,755	208.9
	12/31/17	231,069	198,483	32,586	85.9	18,661	174.6
	12/31/18	244,209	195,570	48,639	80.1	18,802	258.7
	12/31/19	259,181	220,293	38,888	85.0	19,596	198.4
	12/31/20	271,116	244,133	26,983	90.0	20,071	134.4
	12/31/21	282,957	282,030	927	99.7	20,801	4.5
	12/31/22	297,575	262,307	35,268	88.1	21,202	166.3

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedule of Employers' Net Pension Liability (Concluded)

Year Ended December 31

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	(5) Projected Covered Payroll	(6) Net Pension Liability/ (Asset) as a Percentage of Covered Payroll
Utah Governors and Legislators Retirement Plan	12/31/13	\$ 11,879	10,166	1,713	85.6%	\$ 390	439.2%
	12/31/14	12,267	10,366	1,901	84.5	928	204.8
	12/31/15	12,247	10,039	2,208	82.0	943	234.1
	12/31/16	12,654	10,352	2,302	81.8	799	288.1
	12/31/17	13,074	11,220	1,854	85.8	722	256.6
	12/31/18	13,177	10,537	2,640	80.0	639	413.1
	12/31/19	13,053	11,344	1,709	86.9	639	267.4
	12/31/20	13,330	12,055	1,275	90.4	757	168.4
	12/31/21	13,202	13,425	(223)	101.7	719	(31.0)
	12/31/22	13,166	12,122	1,044	92.1	564	185.1
Tier 2 Public Employees Contributory Retirement System	12/31/13	\$ 48,292	47,690	602	98.8%	\$ 353,227	0.2%
	12/31/14	86,261	89,291	(3,030)	103.5	492,882	(0.6)
	12/31/15	140,321	140,539	(218)	100.2	637,560	0.0
	12/31/16	228,450	217,293	11,157	95.1	822,196	1.4
	12/31/17	338,035	329,218	8,817	97.4	996,965	0.9
	12/31/18	467,461	424,633	42,828	90.8	1,171,543	3.7
	12/31/19	634,074	611,583	22,491	96.5	1,380,488	1.6
	12/31/20	846,868	832,485	14,383	98.3	1,609,102	0.9
	12/31/21	1,111,694	1,154,018	(42,324)	103.8	1,810,502	(2.3)
	12/31/22	1,412,220	1,303,331	108,889	92.3	2,099,223	5.2
Tier 2 Public Safety and Firefighter Contributory Retirement System	12/31/13	\$ 3,345	3,935	(590)	117.6%	\$ 20,215	(2.9)%
	12/31/14	7,226	8,705	(1,479)	120.5	35,019	(4.2)
	12/31/15	13,628	15,089	(1,461)	110.7	53,276	(2.7)
	12/31/16	24,266	25,135	(869)	103.6	74,834	(1.2)
	12/31/17	39,023	40,180	(1,157)	103.0	98,113	(1.2)
	12/31/18	56,841	54,336	2,505	95.6	123,439	2.0
	12/31/19	90,787	81,381	9,406	89.6	156,778	6.0
	12/31/20	129,253	120,284	8,969	93.1	188,667	4.8
	12/31/21	177,580	182,634	(5,054)	102.8	223,892	(2.3)
	12/31/22	231,743	223,401	8,342	96.4	265,137	3.1
All Retirement Systems	12/31/13	\$ 29,171,564	25,096,072	4,075,492	86.0%	\$ 4,669,560	87.3%
	12/31/14	30,025,458	26,569,124	3,456,334	88.5	4,679,491	73.9
	12/31/15	31,150,334	26,686,840	4,463,494	85.7	4,714,627	94.7
	12/31/16	33,194,895	28,544,316	4,650,579	86.0	4,839,495	96.1
	12/31/17	35,298,933	31,878,618	3,420,315	90.3	4,998,694	68.4
	12/31/18	36,708,181	31,259,522	5,448,659	85.2	5,146,312	105.9
	12/31/19	38,396,056	35,198,555	3,197,501	91.7	5,373,167	59.5
	12/31/20	40,379,797	38,996,379	1,383,418	96.6	5,609,104	24.7
	12/31/21	42,805,030	45,052,735	(2,247,705)	105.3	5,896,080	(38.1)
	12/31/22	44,773,715	42,074,517	2,699,198	94.0	6,201,485	43.5

Utah Retirement Systems
Required Supplementary Information (Continued)

Schedules of Employer Contributions

(dollars in thousands)						
System	Year Ended December 31	Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Payroll	Contributions as a Percentage of Covered Payroll**
Noncontributory Retirement System	2013	\$ 710,933	710,933	—	3,705,771	19.18%
	2014	772,420	772,420	—	3,570,912	21.63
	2015	813,449	813,449	—	3,458,286	23.52
	2016	831,631	831,631	—	3,406,567	24.41
	2017	854,255	854,255	—	3,375,321	25.31
	2018	858,444	858,444	—	3,330,548	25.77
	2019	888,078	888,078	—	3,328,314	26.68
	2020	912,525	912,525	—	3,306,382	27.60
	2021	942,910	942,910	—	3,361,940	28.05
	2022	969,922	969,922	—	3,360,198	28.87
Contributory Retirement System	2013	\$ 12,874	12,874	—	98,023	13.13%
	2014	12,954	12,954	—	90,623	14.29
	2015	11,719	11,719	—	82,426	14.22
	2016	8,188	8,188	—	53,615	15.27
	2017	7,946	7,946	—	45,177	17.59
	2018	6,027	6,027	—	39,279	15.34
	2019	5,433	5,433	—	34,317	15.83
	2020	4,759	4,759	—	30,748	15.48
	2021	4,204	4,204	—	26,782	15.70
	2022	3,675	3,675	—	26,521	13.86
Public Safety Retirement System	2013	\$ 128,744	128,744	—	365,998	35.18%
	2014	135,588	135,588	—	360,750	37.59
	2015	141,024	141,024	—	355,171	39.71
	2016	147,099	147,099	—	352,407	41.74
	2017	145,814	145,814	—	350,783	41.57
	2018	147,101	147,101	—	348,475	42.21
	2019	150,467	150,467	—	339,705	44.29
	2020	150,512	150,512	—	338,919	44.41
	2021	152,524	152,524	—	325,616	46.84
	2022	168,535	168,535	—	313,938	53.68
Firefighters Retirement System	2013	\$ 14,779	14,779	—	110,741	13.35%
	2014	19,668	19,668	—	111,305	17.67
	2015	23,908	23,908	—	111,133	21.51
	2016	17,523	17,523	—	112,322	15.60
	2017	7,938	7,938	—	112,953	7.03
	2018	15,768	15,768	—	113,587	13.88
	2019	49,302	49,302	—	113,330	43.50
	2020	27,769	27,769	—	114,458	24.26
	2021	28,635	28,635	—	114,635	24.98
	2022	29,211	29,211	—	114,702	25.47
Judges Retirement System	2013	\$ 6,488	6,488	—	15,195	42.70%
	2014	7,113	7,113	—	16,072	44.26
	2015	8,208	8,208	—	15,832	51.84
	2016	8,852	8,852	—	16,755	52.83
	2017	9,040	9,040	—	18,661	48.44
	2018	9,609	9,609	—	18,802	51.11
	2019	10,036	10,036	—	19,596	51.21
	2020	10,056	10,056	—	20,071	50.10
	2021	10,303	10,303	—	20,801	49.53
	2022	10,713	10,713	—	21,202	50.53

*Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

**Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Utah Retirement Systems Required Supplementary Information *(Continued)*

Schedule of Employer Contributions *(Concluded)*

Year Ended December 31

System	Year Ended December 31	<i>(dollars in thousands)</i>		Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Payroll	Contributions as a Percentage of Covered Payroll**
		Actuarial Determined Contribution*					
Utah Governors and Legislators Retirement Plan	2013	\$ 252		252	—	390	64.62%
	2014	411		411	—	928	44.29
	2015	421		421	—	943	44.64
	2016	421		421	—	799	52.69
	2017	404		404	—	722	55.96
	2018	392		392	—	639	61.35
	2019	384		384	—	639	60.09
	2020	369		369	—	757	48.75
	2021	361		361	—	719	50.21
	2022	422		422	—	564	74.82
Tier 2 Public Employees Contributory Retirement System	2013	\$ 25,743		25,743	—	353,227	7.29%
	2014	37,299		37,299	—	492,882	7.57
	2015	49,645		49,645	—	637,560	7.79
	2016	63,062		63,062	—	822,196	7.67
	2017	79,175		79,175	—	996,965	7.94
	2018	97,680		97,680	—	1,171,543	8.34
	2019	119,839		119,839	—	1,380,488	8.68
	2020	138,466		138,466	—	1,609,102	8.61
	2021	168,232		168,232	—	1,810,502	9.29
	2022	217,179		217,179	—	2,099,223	10.35
Tier 2 Public Safety and Firefighter Contributory Retirement System	2013	\$ 2,451		2,451	—	20,215	12.12%
	2014	4,365		4,365	—	35,019	12.46
	2015	6,221		6,221	—	53,276	11.68
	2016	8,488		8,488	—	74,834	11.34
	2017	11,126		11,126	—	98,113	11.34
	2018	14,295		14,295	—	123,439	11.58
	2019	18,197		18,197	—	156,778	11.61
	2020	25,020		25,020	—	188,667	13.26
	2021	33,406		33,406	—	223,892	14.92
	2022	44,272		44,272	—	265,137	16.70
All Retirement Systems	2013	\$ 902,264		902,264	—	4,669,560	19.32%
	2014	989,818		989,818	—	4,678,491	21.16
	2015	1,054,595		1,054,595	—	4,714,628	22.37
	2016	1,085,264		1,085,264	—	4,839,495	22.43
	2017	1,115,698		1,115,698	—	4,998,694	22.32
	2018	1,149,316		1,149,316	—	5,146,312	22.33
	2019	1,241,736		1,241,736	—	5,373,167	23.11
	2020	1,269,476		1,269,476	—	5,609,104	22.63
	2021	1,340,575		1,340,575	—	5,896,080	22.74
	2022	1,443,929		1,443,929	—	6,201,485	23.28

*Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

**Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Schedule of Investment Returns

Year Ended December 31

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	(5.23)%	17.28%	12.64%	13.80%	(0.38)%	13.38%	8.73%	2.02%	7.94%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Notes to Required Supplementary Information



Note 1

Schedules of Change in the Employer Net Pension Liability

The total pension liability contained in this schedule was provided by the Systems actuary, Gabriel, Roeder, Smith & Company. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the Retirement Systems.

The Board certifies the contribution rates that employers are contractually required to contribute to the retirement system. Per 49-11-301(5) of the Utah Code, if the funded ratio of the plan is less than 110%, then the Board is permitted to maintain the prior year's contribution rate if the actuarially determined contribution is lower. The Board has historically followed this policy. The projected covered payroll is an estimated payroll figure based upon the January 1, 2022, census data.

Note 2

Schedules of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in the schedule.

The actuarially determined contribution rates determined by an actuarial valuation are effective for the fiscal year beginning 18 months after the valuation date. For example, the actuarially determined contribution rate determined by the January 1, 2022 valuation is effective for the fiscal year beginning July 1, 2023.

The actual contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems. Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Notes to Required Supplementary Information (Concluded)

Note 3

Actuarial Assumptions

The information presented in the required supplementary schedules was used in the actuarial valuation for purposes of determining the actuarially determined contribution rate. The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the Board. Additional information as of the latest actuarial valuation follows.

Summary of Actuarial Assumptions

	Noncontributory	Contributory	Public Safety	Firefighters	Judges	Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter
Valuation date	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age
Amortization method	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll
Amortization period	Open Group* 20-Year Open Period	Open Group* 20-Year Open Period	Open Group 20-Year Open Period	Open Group 20-Year Open Period	Open Group 20-Year Open Period	Closed Group 12-Year Closed Period	Open Group 20-Year Open Period	Open Group 20-Year Open Period
Actuarial asset valuation method (All Systems under same method)	Based on the total fair value income of investments with the excess or shortfall of actual investment income over or under the expected investment return smoothed over five years. One-fifth of the excess or shortfall is recognized each year for five years.							
Actuarial assumptions: Investment rate of return	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%
Projected salary increases**	3.25-9.25%	3.25-9.25%	3.25-6.75%	3.25-8.50%	3.25%	None	3.25-9.25%	3.25-8.50%
Inflation rate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Post-retirement cost-of-living adjustment	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Mortality: (Non-Educators)	Male retirees: 110% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 110% of 2020 PR UTAH Retiree Mortality Table for females, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020.							
Mortality: (Educators)	Male retirees: 90% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 90% of 2020 PR UTAH Retiree Mortality Table for females, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020.							

Note: All post-retirement cost-of-living adjustments are non-compounding and are based on the original benefit except for Judges, which is a compounding benefit. The cost-of-living adjustments are also limited to the actual CPI increase for the year, although unused CPI increases not met may be carried forward to subsequent years.

*The amortization period for the Higher Education divisions (Noncontributory and Contributory) are closed 15-year periods.

**Composed of 2.50% inflation, plus 0.75% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service.

Noncontributory Retirement System

Schedules of Fiduciary Net Position —
Pension Trust Fund by Division

Year Ended December 31, 2022

With Comparative Totals for Year Ended December 31, 2021

(in thousands)

	Local Government	State and School	Higher Education	Total All Divisions	
				2022	2021
Assets:					
Cash	\$ 1	3,514	1	3,516	3,769
Receivables:					
Employer contributions	5,365	28,357	2,781	36,503	43,848
Investments	52,120	183,295	16,767	252,182	498,666
Total receivables	57,485	211,652	19,548	288,685	542,514
Investments at fair value:					
Short-term securities	195,636	688,005	62,937	946,578	2,623,955
Debt securities	1,035,095	3,640,181	332,994	5,008,270	4,247,742
Equity investments	2,094,457	7,365,698	673,795	10,133,950	13,165,532
Absolute return	1,206,743	4,243,825	388,214	5,838,782	5,351,791
Private equity	886,072	3,116,101	285,053	4,287,226	4,650,105
Real assets	1,380,257	4,854,030	444,034	6,678,321	5,409,284
Total investments	6,798,260	23,907,840	2,187,027	32,893,127	35,448,409
Invested securities lending collateral	223,078	784,512	71,765	1,079,355	691,972
Property and equipment at cost, net of accumulated depreciation	2,933	10,313	943	14,189	9,982
Total assets	7,081,757	24,917,831	2,279,284	34,278,872	36,696,646
Liabilities:					
Securities lending liability	223,078	784,512	71,765	1,079,355	691,972
Disbursements in excess of cash balance	8,662	30,463	2,787	41,912	26,990
Compensated absences, post-employment benefits and insurance reserve	3,896	13,700	1,253	18,849	20,998
Investment accounts payable	94,048	334,356	30,256	458,660	810,306
Real estate liabilities	16,025	56,353	5,155	77,533	77,845
Total liabilities	345,709	1,219,384	111,216	1,676,309	1,628,111
Net position restricted for pensions	\$ 6,736,048	23,698,447	2,168,068	32,602,563	35,068,535

Noncontributory Retirement System

Schedules of Changes in Fiduciary Net Position —
Pension Trust Fund by Division

Year Ended December 31, 2022

With Comparative Totals for Year Ended December 31, 2021

(in thousands)

	Local Government	State and School	Higher Education	Total All Divisions	
				2022	2021
Additions:					
Contributions:					
Member	\$ 4,131	11,048	236	15,415	16,178
Employer	196,085	723,554	50,283	969,922	942,910
Total contributions	200,216	734,602	50,519	985,337	959,088
Investment income:					
Net appreciation in fair value of investments	(493,944)	(1,744,531)	(159,412)	(2,397,887)	4,670,873
Interest, dividends, and other investment income	136,573	482,353	44,077	663,003	595,088
Total income from investment activity	(357,371)	(1,262,178)	(115,335)	(1,734,884)	5,265,961
Less investment expenses	21,134	74,641	6,821	102,596	70,215
Net income from investment activity	(378,505)	(1,336,819)	(122,156)	(1,837,480)	5,195,746
Income from security lending activity	875	3,092	283	4,250	6,639
Less security lending expense	70	247	23	340	633
Net income from security lending activity	805	2,845	260	3,910	6,006
Net investment income (loss)	(377,700)	(1,333,974)	(121,896)	(1,833,570)	5,201,752
Transfers from affiliated systems	30,157	10,827	17,608	58,592	5,986
Total additions	(147,327)	(588,545)	(53,769)	(789,641)	6,166,826
Deductions:					
Retirement benefits	257,818	1,058,554	86,888	1,403,260	1,327,922
Cost-of-living benefits	39,969	205,784	13,627	259,380	237,124
Refunds	1,009	2,325	—	3,334	1,313
Administrative expenses	2,037	7,678	642	10,357	10,004
Transfers to affiliated systems	—	—	—	—	—
Other*	—	—	—	—	—
Total deductions	300,833	1,274,341	101,157	1,676,331	1,576,363
Increase (decrease) from operations	(448,160)	(1,862,886)	(154,926)	(2,465,972)	4,590,463
Net position restricted for pensions beginning of year	7,184,208	25,561,333	2,322,994	35,068,535	30,478,072
Net position restricted for pensions end of year	\$ 6,736,048	23,698,447	2,168,068	32,602,563	35,068,535

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Noncontributory Retirement System

Schedules of Changes in the Employers' Net Pension Liability by Division

Year Ended December 31

	<i>(in thousands)</i>		
Local Government	2022	2021	2020
Total pension liability			
Service cost	\$ 89,107	88,339	90,169
Interest	445,706	427,970	407,562
Benefit changes	—	—	—
Differences between expected and actual experience	59,809	39,890	72,209
Assumption changes	—	79,432	(9,722)
Benefit payments	(297,787)	(275,396)	(254,837)
Refunds	(1,009)	(222)	(853)
Net change in total pension liability	295,826	360,013	304,528
Total pension liability — beginning	6,611,497	6,251,484	5,946,956
Total pension liability — ending (a)	6,907,323	6,611,497	6,251,484
Plan fiduciary net position			
Contributions — member	4,131	5,811	4,664
Contributions — employer	196,085	188,215	185,102
Net investment income	(377,700)	1,062,673	695,397
Benefit payments	(297,787)	(275,396)	(254,837)
Refunds	(1,009)	(222)	(853)
Administrative expense	(2,037)	(1,958)	(1,915)
Net transfers with affiliated systems	30,157	4,895	2,563
Other*	—	—	—
Net change in plan fiduciary net position	(448,160)	984,018	630,121
Plan fiduciary net position — beginning	7,184,208	6,200,190	5,570,069
Plan fiduciary net position — ending (b)	6,736,048	7,184,208	6,200,190
Net pension liability/(asset) — ending (a-b)	\$ 171,275	(572,711)	51,294
Plan fiduciary net position as a percentage of the total pension liability	97.5%	108.7%	99.2%
Projected covered payroll	\$ 775,035	787,857	796,350
Net pension liability/(asset) as a percentage of covered payroll	22.1%	(72.7)%	6.4%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Utah Retirement Systems

						Local Government
2019	2018	2017	2016	2015	2014	2013
90,437	91,556	93,774	96,049	91,304	93,436	100,789
388,407	371,702	359,989	330,648	328,120	310,587	297,617
—	—	—	48,400	—	—	6,063
42,865	5,305	(22,546)	18,123	(19,610)	(16,109)	(39,370)
—	—	129,368	112,696	—	(52,889)	—
(235,654)	(218,307)	(202,324)	(191,011)	(177,915)	(159,967)	(149,891)
(593)	(738)	(814)	(392)	(248)	(235)	(620)
285,462	249,518	357,447	414,513	221,651	174,823	214,588
5,661,494	5,411,976	5,054,529	4,640,016	4,418,365	4,243,542	4,028,954
5,946,956	5,661,494	5,411,976	5,054,529	4,640,016	4,418,365	4,243,542
3,027	4,491	3,928	5,023	5,481	3,859	2,637
180,808	176,481	174,037	171,967	167,015	157,930	147,105
702,659	(18,315)	586,793	346,001	69,895	266,210	478,461
(235,654)	(218,307)	(202,324)	(191,011)	(177,915)	(159,967)	(149,891)
(593)	(738)	(814)	(392)	(248)	(235)	(620)
(1,829)	(1,919)	(1,828)	(1,671)	(1,622)	(1,604)	(1,497)
(3,471)	9,583	1,647	8,323	27,420	14,058	(5,302)
—	—	—	—	—	—	—
644,947	(48,724)	561,439	338,240	90,026	280,251	470,893
4,925,122	4,973,846	4,412,407	4,074,167	3,984,141	3,703,890	3,232,997
5,570,069	4,925,122	4,973,846	4,412,407	4,074,167	3,984,141	3,703,890
376,887	736,372	438,130	642,122	565,849	434,224	539,652
93.7%	87.0%	91.9%	87.3%	87.8%	90.2%	87.3%
796,508	804,891	811,404	830,406	826,998	845,364	864,838
47.3%	91.5%	54.0%	77.3%	68.4%	51.4%	62.4%

Continued on page 120.

Noncontributory Retirement System
Schedules of Changes in the Employers'
Net Pension Liability by Division (Continued)

Year Ended December 31

State and School	(in thousands)		
	2022	2021	2020
Total pension liability			
Service cost	\$ 309,264	298,881	288,524
Interest	1,671,358	1,596,027	1,525,827
Benefit changes	—	—	—
Differences between expected and actual experience	265,674	483,241	183,309
Assumption changes	—	283,532	180,257
Benefit payments	(1,264,338)	(1,196,080)	(1,147,403)
Refunds	(2,325)	(1,069)	(1,483)
Net change in total pension liability	979,633	1,464,532	1,029,031
Total pension liability — beginning	24,878,089	23,413,557	22,384,526
Total pension liability — ending (a)	25,857,722	24,878,089	23,413,557
Plan fiduciary net position			
Contributions — member	11,048	9,488	11,141
Contributions — employer	723,554	704,543	676,531
Net investment income	(1,333,974)	3,792,564	2,494,469
Benefit payments	(1,264,338)	(1,196,080)	(1,147,403)
Refunds	(2,325)	(1,069)	(1,483)
Administrative expense	(7,678)	(7,427)	(7,245)
Net transfers with affiliated systems	10,827	178,879	(108,399)
Other*	—	—	—
Net change in plan fiduciary net position	(1,862,886)	3,480,898	1,917,611
Plan fiduciary net position — beginning	25,561,333	22,080,435	20,162,824
Plan fiduciary net position — ending (b)	23,698,447	25,561,333	22,080,435
Net pension liability/(asset) — ending (a-b)	\$ 2,159,275	(683,244)	1,333,122
Plan fiduciary net position as a percentage of the total pension liability	91.6%	102.7%	94.3%
Projected covered payroll	\$ 2,384,286	2,371,684	2,301,546
Net pension liability/(asset) as a percentage of covered payroll	90.6%	(28.8)%	57.9%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Utah Retirement Systems

							State and School
2019	2018	2017	2016	2015	2014	2013	
286,588	312,835	310,207	311,641	303,494	314,556	340,531	
1,478,470	1,548,536	1,517,587	1,434,005	1,447,699	1,389,106	1,348,596	
—	—	—	—	—	—	17,060	
32,444	27,375	(61,688)	(11,715)	(168,556)	(188,714)	(169,131)	
—	—	512,819	451,045	—	(105,032)	—	
(1,082,760)	(1,101,907)	(1,045,713)	(993,306)	(945,732)	(883,831)	(824,793)	
(2,511)	(2,028)	(3,821)	(3,974)	(2,248)	(1,969)	(1,834)	
712,231	784,811	1,229,391	1,187,696	634,657	524,116	710,429	
23,461,454	22,676,643	21,447,252	20,259,556	19,624,899	19,100,783	18,390,354	
24,173,685	23,461,454	22,676,643	21,447,252	20,259,556	19,624,899	19,100,783	
8,276	10,111	13,357	11,285	11,539	9,728	11,571	
655,354	681,963	680,218	659,664	646,434	614,490	563,828	
2,561,197	(73,892)	2,400,489	1,437,910	296,853	1,152,843	2,110,520	
(1,082,760)	(1,101,907)	(1,045,713)	(993,306)	(945,732)	(883,831)	(824,793)	
(2,511)	(2,028)	(3,821)	(3,974)	(2,248)	(1,969)	(1,834)	
(6,960)	(8,043)	(7,751)	(7,185)	(7,175)	(7,224)	(6,832)	
(44,024)	3,452	(11,834)	(16,328)	6,228	16,409	(36,975)	
(161,251)	—	—	—	—	—	—	
1,927,321	(490,344)	2,024,945	1,088,066	5,899	900,446	1,815,485	
19,740,937	20,231,281	18,206,336	17,118,270	17,112,371	16,211,925	14,396,440	
21,668,258	19,740,937	20,231,281	18,206,336	17,118,270	17,112,371	16,211,925	
2,505,427	3,720,517	2,445,362	3,240,916	3,141,286	2,512,528	2,888,858	
89.6%	84.1%	89.2%	84.9%	84.5%	87.2%	84.9%	
2,290,749	2,525,657	2,563,917	2,576,161	2,631,288	2,725,548	2,840,933	
109.4%	147.3%	95.4%	125.8%	119.4%	92.2%	101.7%	

Continued on page 122.

Noncontributory Retirement System
Schedules of Changes in the Employers'
Net Pension Liability by Division (Continued)

Year Ended December 31

	(in thousands)		
Higher Education	2022	2021	2020
Total pension liability			
Service cost	\$ 24,159	23,579	23,753
Interest	139,673	143,435	138,237
Benefit changes	—	—	—
Differences between expected and actual experience	25,796	(118,626)	(2,965)
Assumption changes	—	23,590	5,849
Benefit payments	(100,515)	(93,570)	(86,387)
Refunds	—	(22)	(2)
Net change in total pension liability	89,113	(21,614)	78,485
Total pension liability — beginning	2,077,204	2,098,818	2,020,333
Total pension liability — ending (a)	2,166,317	2,077,204	2,098,818
Plan fiduciary net position			
Contributions — member	236	879	580
Contributions — employer	50,283	50,152	50,892
Net investment income	(121,896)	346,515	241,123
Benefit payments	(100,515)	(93,570)	(86,387)
Refunds	—	(22)	(2)
Administrative expense	(642)	(619)	(645)
Net transfers with affiliated systems	17,608	(177,788)	88,856
Other*	—	—	—
Net change in plan fiduciary net position	(154,926)	125,547	294,417
Plan fiduciary net position — beginning	2,322,994	2,197,447	1,903,030
Plan fiduciary net position — ending (b)	2,168,068	2,322,994	2,197,447
Net pension liability/(asset) — ending (a-b)	\$ (1,751)	(245,790)	(98,629)
Plan fiduciary net position as a percentage of the total pension liability	100.1%	111.8%	104.7%
Projected covered payroll	\$ 200,877	202,399	208,486
Net pension liability/(asset) as a percentage of covered payroll	(0.9)%	(121.4)%	(47.3)%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Higher Education

2019

27,514

122,572

—

159,680

—

(78,569)

(23)

231,174

1,789,159

2,020,333

427

51,916

235,332

(78,569)

(23)

(622)

27,884

161,251

397,596

1,505,434

1,903,030

117,303

94.2%

241,057

48.7%

Continued on page 124.

Noncontributory Retirement System
Schedules of Changes in the Employers'
Net Pension Liability by Division (Concluded)

Year Ended December 31

	<i>(in thousands)</i>		
Total All Divisions	2022	2021	2020
Total pension liability			
Service cost	\$ 422,530	410,799	402,446
Interest	2,256,737	2,167,432	2,071,626
Benefit changes	—	—	—
Differences between expected and actual experience	351,279	404,505	252,553
Assumption changes	—	386,554	176,384
Benefit payments	(1,662,640)	(1,565,046)	(1,488,627)
Refunds	(3,334)	(1,313)	(2,338)
Net change in total pension liability	1,364,572	1,802,931	1,412,044
Total pension liability — beginning	33,566,790	31,763,859	30,351,815
Total pension liability — ending (a)	34,931,362	33,566,790	31,763,859
Plan fiduciary net position			
Contributions — member	15,415	16,178	16,385
Contributions — employer	969,922	942,910	912,525
Net investment income	(1,833,570)	5,201,752	3,430,989
Benefit payments	(1,662,640)	(1,565,046)	(1,488,627)
Refunds	(3,334)	(1,313)	(2,338)
Administrative expense	(10,357)	(10,004)	(9,805)
Net transfers with affiliated systems	58,592	5,986	(16,980)
Other*	—	—	—
Net change in plan fiduciary net position	(2,465,972)	4,590,463	2,842,149
Plan fiduciary net position — beginning	35,068,535	30,478,072	27,635,923
Plan fiduciary net position — ending (b)	32,602,563	35,068,535	30,478,072
Net pension liability/(asset) — ending (a-b)	\$ 2,328,799	(1,501,745)	1,285,787
Plan fiduciary net position as a percentage of the total pension liability	93.3%	104.5%	96.0%
Projected covered payroll	\$ 3,360,198	3,361,940	3,306,382
Net pension liability/(asset) as a percentage of covered payroll	69.3%	(44.7)%	38.9%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Utah Retirement Systems

						Total All Divisions
2019	2018	2017	2016	2015	2014	2013
404,539	404,391	403,981	407,690	394,798	407,992	441,320
1,989,449	1,920,238	1,877,576	1,764,653	1,775,819	1,699,693	1,646,213
—	—	—	48,400	—	—	23,123
234,989	32,680	(84,234)	6,408	(188,166)	(204,823)	(208,501)
—	—	642,187	563,741	—	(157,921)	—
(1,396,983)	(1,320,214)	(1,248,037)	(1,184,317)	(1,123,647)	(1,043,798)	(974,684)
(3,127)	(2,766)	(4,635)	(4,366)	(2,496)	(2,204)	(2,454)
1,228,867	1,034,329	1,586,838	1,602,209	856,308	698,939	925,017
29,122,948	28,088,619	26,501,781	24,899,572	24,043,264	23,344,325	22,419,308
30,351,815	29,122,948	28,088,619	26,501,781	24,899,572	24,043,264	23,344,325
11,730	14,602	17,285	16,308	17,020	13,587	14,208
888,078	858,444	854,255	831,631	813,449	772,420	710,933
3,499,188	(92,207)	2,987,282	1,783,911	366,748	1,419,053	2,588,981
(1,396,983)	(1,320,214)	(1,248,037)	(1,184,317)	(1,123,647)	(1,043,798)	(974,684)
(3,127)	(2,766)	(4,635)	(4,366)	(2,496)	(2,204)	(2,454)
(9,411)	(9,962)	(9,579)	(8,856)	(8,797)	(8,828)	(8,329)
(19,611)	13,035	(10,187)	(8,005)	33,648	30,467	(42,277)
—	—	—	—	—	—	—
2,969,864	(539,068)	2,586,384	1,426,306	95,925	1,180,697	2,286,378
24,666,059	25,205,127	22,618,743	21,192,437	21,096,512	19,915,815	17,629,437
27,635,923	24,666,059	25,205,127	22,618,743	21,192,437	21,096,512	19,915,815
2,715,892	4,456,889	2,883,492	3,883,038	3,707,135	2,946,752	3,428,510
91.1%	84.7%	89.7%	85.3%	85.1%	87.7%	85.3%
3,328,314	3,330,548	3,375,321	3,406,567	3,458,286	3,570,912	3,705,771
81.6%	133.8%	85.4%	114.0%	107.2%	82.5%	92.5%

Noncontributory Retirement System

Schedules of Net Pension Liability by Division

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Position as a Fiduciary Net Percentage of the Total Pension Liability	(5) Projected Covered Payroll	(6) Net Pension Liability (Asset) as a Percentage of Covered Payroll
Noncontributory Local Government	12/31/13	\$ 4,243,542	3,703,890	539,652	87.3%	\$ 864,838	62.4%
	12/31/14	4,418,365	3,984,141	434,224	90.2	845,364	51.4
	12/31/15	4,640,016	4,074,167	565,849	87.8	826,998	68.4
	12/31/16	5,054,529	4,412,407	642,122	87.3	830,406	77.3
	12/31/17	5,411,976	4,973,846	438,130	91.9	811,404	54.0
	12/31/18	5,661,494	4,925,122	736,372	87.0	804,891	91.5
	12/31/19	5,946,956	5,570,069	376,887	93.7	796,508	47.3
	12/31/20	6,251,484	6,200,190	51,294	99.2	796,350	6.4
	12/31/21	6,611,497	7,184,208	(572,711)	108.7	787,857	(72.7)
	12/31/22	6,907,323	6,736,048	171,275	97.5	775,035	22.1
Noncontributory State and School	12/31/13	\$ 19,100,783	16,211,925	2,888,858	84.9%	\$ 2,840,933	101.7%
	12/31/14	19,624,899	17,112,371	2,512,528	87.2	2,725,548	92.2
	12/31/15	20,259,556	17,118,270	3,141,286	84.5	2,631,288	119.4
	12/31/16	21,447,252	18,206,336	3,240,916	84.9	2,576,161	125.8
	12/31/17	22,676,643	20,231,281	2,445,362	89.2	2,563,917	95.4
	12/31/18	23,461,454	19,740,937	3,720,517	84.1	2,525,657	147.3
	12/31/19	22,384,526	20,162,824	2,221,702	90.1	2,290,749	97.0
	12/31/20	23,413,557	22,080,435	1,333,122	94.3	2,301,546	57.9
	12/31/21	24,878,089	25,561,333	(683,244)	102.7	2,371,684	(28.8)
	12/31/22	25,857,722	23,698,447	2,159,275	91.6	2,384,286	90.6
Noncontributory Higher Education	12/31/19	\$ 2,020,333	1,903,030	117,303	94.2%	\$ 241,057	48.7%
	12/31/20	2,098,818	2,197,447	(98,629)	104.7	208,486	(47.3)
	12/31/21	2,077,204	2,322,994	(245,790)	111.8	202,399	(121.4)
	12/31/22	2,166,317	2,168,068	(1,751)	100.1	200,877	(0.9)
Total Noncontributory Retirement System	12/31/13	\$ 23,344,325	19,915,815	3,428,510	85.3%	\$ 3,705,771	92.5%
	12/31/14	24,043,264	21,096,512	2,946,752	87.7	3,570,912	82.5
	12/31/15	24,899,572	21,192,437	3,707,135	85.1	3,458,286	107.2
	12/31/16	26,501,781	22,618,743	3,883,038	85.3	3,406,567	114.0
	12/31/17	28,088,619	25,205,127	2,883,492	89.7	3,375,321	85.4
	12/31/18	29,122,948	24,666,059	4,456,889	84.7	3,330,548	133.8
	12/31/19	30,351,815	27,635,923	2,715,892	91.1	3,328,314	81.6
	12/31/20	31,763,859	30,478,072	1,285,787	96.0	3,306,382	38.9
	12/31/21	33,566,790	35,068,535	(1,501,745)	104.5	3,361,940	(44.7)
	12/31/22	34,931,362	32,602,563	2,328,799	93.3	3,360,198	69.3

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Noncontributory Retirement System

Schedules of Employer Contributions by Division

<i>(dollars in thousands)</i>							
System	Year Ended		Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Payroll	Contributions as a Percentage of Covered Payroll**
Noncontributory Local Government	2013	\$	147,105	147,105	—	864,838	17.01%
	2014		157,930	157,930	—	845,364	18.68
	2015		167,015	167,015	—	826,998	20.20
	2016		171,967	171,967	—	830,406	20.71
	2017		174,037	174,037	—	811,404	21.45
	2018		176,481	176,481	—	804,891	21.93
	2019		180,808	180,808	—	796,508	22.70
	2020		185,102	185,102	—	796,350	23.24
	2021		188,215	188,215	—	787,857	23.89
	2022		196,085	196,085	—	775,035	25.30
Noncontributory State and School	2013	\$	563,828	563,828	—	2,840,933	19.85%
	2014		614,490	614,490	—	2,725,548	22.55
	2015		646,490	646,434	—	2,631,288	24.57
	2016		659,664	659,664	—	2,576,161	25.61
	2017		680,218	680,218	—	2,563,917	26.53
	2018		681,963	681,963	—	2,525,657	27.00
	2019		655,354	655,354	—	2,290,749	28.61
	2020		676,531	676,531	—	2,301,546	29.39
	2021		704,543	704,543	—	2,371,684	29.71
	2022		723,554	723,554	—	2,384,286	30.35
Noncontributory Higher Education	2019	\$	51,916	51,916	—	241,057	21.54%
	2020		50,892	50,892	—	208,486	24.41
	2021		50,152	50,152	—	202,399	24.78
	2022		50,283	50,283	—	200,877	25.03
Total Noncontributory Retirement System	2013	\$	710,933	710,933	—	3,705,771	19.18%
	2014		772,420	772,420	—	3,570,912	21.63
	2015		813,449	813,449	—	3,458,286	23.52
	2016		831,631	831,631	—	3,406,567	24.41
	2017		854,255	854,255	—	3,375,321	25.31
	2018		858,444	858,444	—	3,330,548	25.77
	2019		888,078	888,078	—	3,328,314	26.68
	2020		912,525	912,525	—	3,306,382	27.60
	2021		942,910	942,910	—	3,361,940	28.05
	2022		969,922	969,922	—	3,360,198	28.87

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

*Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

**Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Contributory Retirement System

Schedules of Fiduciary Net Position —
Pension Trust Fund by Division

Year Ended December 31, 2022

With Comparative Totals for Year Ended December 31, 2021

(in thousands)

	Local Government	State and School	Higher Education	Total All Divisions	
				2022	2021
Assets:					
Cash	\$ 1	1	1	3	3
Receivables:					
Member contributions	23	14	11	48	55
Employer contributions	53	41	33	127	181
Investments	3,450	4,755	1,213	9,418	20,601
Total receivables	3,526	4,810	1,257	9,593	20,837
Investments at fair value:					
Short-term securities	12,950	17,848	4,552	35,350	108,405
Debt securities	68,519	94,434	24,083	187,036	175,489
Equity investments	138,644	191,082	48,731	378,457	543,915
Absolute return	79,881	110,094	28,077	218,052	221,102
Private equity	58,654	80,838	20,616	160,108	192,113
Real assets	91,367	125,924	32,114	249,405	223,476
Total investments	450,015	620,220	158,173	1,228,408	1,464,500
Invested securities lending collateral	14,767	20,352	5,190	40,309	28,587
Property and equipment at cost, net of accumulated depreciation	194	268	68	530	412
Total assets	468,503	645,651	164,689	1,278,843	1,514,339
Liabilities:					
Securities lending liability	14,767	20,352	5,190	40,309	28,587
Disbursements in excess of cash balance	573	790	202	1,565	1,115
Compensated absences, post-employment benefits and insurance reserve	258	355	91	704	868
Investment accounts payable	6,226	8,580	2,188	16,994	33,317
Real estate liabilities	1,061	1,462	373	2,896	3,215
Total liabilities	22,885	31,539	8,044	62,468	67,102
Net position restricted for pensions	\$ 445,618	614,112	156,645	1,216,375	1,447,237

Contributory Retirement System

Schedules of Changes in Fiduciary Net Position —
Pension Trust Fund by Division

Year Ended December 31, 2022

With Comparative Totals for Year Ended December 31, 2021

(in thousands)

	Local Government	State and School	Higher Education	Total All Divisions	
				2022	2021
Additions:					
Contributions:					
Member	\$ 655	391	194	1,240	1,445
Employer	1,989	1,114	572	3,675	4,204
Total contributions	2,644	1,505	766	4,915	5,649
Investment income:					
Net appreciation in fair value of investments	(33,773)	(46,859)	(11,827)	(92,459)	197,568
Interest, dividends, and other investment income	9,338	12,956	3,270	25,564	25,170
Total income from investment activity	(24,435)	(33,903)	(8,557)	(66,895)	222,738
Less investment expenses	1,445	2,005	506	3,956	2,969
Net income from investment activity	(25,880)	(35,908)	(9,063)	(70,851)	219,769
Income from security lending activity	60	83	21	164	281
Less security lending expense	5	7	2	14	27
Net income from security lending activity	55	76	19	150	254
Net investment income	(25,825)	(35,832)	(9,044)	(70,701)	220,023
Transfers from affiliated systems	—	—	—	—	—
Total additions	(23,181)	(34,327)	(8,278)	(65,786)	225,672
Deductions:					
Retirement benefits	26,977	43,595	8,988	79,560	77,864
Cost-of-living benefits	4,819	8,606	1,366	14,791	13,828
Supplemental retirement benefits	3	11	—	14	20
Refunds	379	469	—	848	1,625
Administrative expenses	140	195	47	382	388
Transfers to affiliated systems	26,995	29,159	13,327	69,481	20,349
Other*	—	—	—	—	—
Total deductions	59,313	82,035	23,728	165,076	114,074
Increase from operations	(82,494)	(116,362)	(32,006)	(230,862)	111,598
Net position restricted for pensions beginning of year	528,112	730,474	188,651	1,447,237	1,335,639
Net position restricted for pensions end of year	\$ 445,618	614,112	156,645	1,216,375	1,447,237

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Contributory Retirement System

Schedules of Changes in the Employers' Net Pension Liability by Division

Year Ended December 31

	(in thousands)		
Local Government	2022	2021	2020
Total pension liability			
Service cost	\$ 1,278	\$ 1,453	1,643
Interest	30,158	30,975	31,014
Benefit changes	—	—	—
Differences between expected and actual experience	927	(9,438)	(4,209)
Assumption changes	—	3,967	2,635
Benefit payments	(31,799)	(31,367)	(29,883)
Refunds	(379)	(1,035)	(809)
Net change in total pension liability	185	(5,445)	391
Total pension liability — beginning	455,718	461,163	460,772
Total pension liability — ending (a)	455,903	455,718	461,163
Plan fiduciary net position			
Contributions — member	655	721	882
Contributions — employer	1,989	2,123	2,397
Net investment income	(25,825)	80,035	55,309
Benefit payments	(31,799)	(31,367)	(29,883)
Refunds	(379)	(1,035)	(809)
Administrative expense	(140)	(140)	(146)
Net transfers with affiliated systems	(26,995)	(1,310)	(2,884)
Other*	—	—	—
Net change in plan fiduciary net position	(82,494)	49,027	24,866
Plan fiduciary net position — beginning	528,112	479,085	454,219
Plan fiduciary net position — ending (b)	445,618	528,112	479,085
Net pension liability/(asset) — ending (a-b)	\$ 10,285	\$ (72,394)	(17,922)
Plan fiduciary net position as a percentage of the total pension liability	97.7%	115.9%	103.9%
Projected covered payroll	\$ 11,477	\$ 13,554	15,375
Net pension liability/(asset) as a percentage of covered payroll	89.6%	(534.1)%	(116.6)%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Utah Retirement Systems

						Local Government
2019	2018	2017	2016	2015	2014	2013
1,731	1,945	2,301	2,659	5,360	5,679	6,352
30,943	31,251	32,120	34,422	35,298	34,255	33,840
—	—	—	(45,057)	—	—	415
(1,383)	(8,463)	(11,176)	(4,618)	(4,833)	(8,465)	(8,020)
—	—	8,760	8,285	—	(2,914)	—
(28,458)	(27,964)	(27,468)	(26,126)	(26,652)	(23,177)	(21,607)
(1,284)	(430)	(703)	(655)	(623)	(1,294)	(855)
1,549	(3,661)	3,834	(31,090)	8,550	4,084	10,125
459,223	462,884	459,050	490,140	481,590	477,506	467,381
460,772	459,223	462,884	459,050	490,140	481,590	477,506
956	1,068	1,289	1,759	2,572	3,103	3,418
2,640	2,762	2,969	3,730	6,384	7,410	6,963
58,811	(1,605)	55,066	34,351	7,597	30,871	58,533
(28,458)	(27,964)	(27,468)	(26,126)	(26,652)	(23,177)	(21,607)
(1,284)	(430)	(703)	(655)	(623)	(1,294)	(855)
(147)	(161)	(162)	(157)	(176)	(179)	(172)
3,058	(9,774)	(2,482)	(6,519)	(21,993)	(10,140)	5,790
—	—	—	—	—	—	—
35,576	(36,104)	28,509	6,383	(32,891)	6,594	52,070
418,643	454,747	426,238	419,855	452,746	446,152	394,082
454,219	418,643	454,747	426,238	419,855	452,746	446,152
6,553	40,580	8,137	32,812	70,285	28,844	31,354
98.6%	91.2%	98.2%	92.9%	85.7%	94.0%	93.4%
16,251	18,276	20,724	23,959	48,590	51,420	54,445
40.3%	222.0%	39.3%	137.0%	144.6%	56.1%	57.6%

Continued on page 132.

Contributory Retirement System
Schedules of Changes in the Employers'
Net Pension Liability by Division (Continued)

Year Ended December 31

State and School	(in thousands)		
	2022	2021	2020
Total pension liability			
Service cost	\$ 803	\$ 935	1,056
Interest	42,092	43,412	43,614
Benefit changes	—	—	—
Differences between expected and actual experience	(3,457)	(8,054)	(3,800)
Assumption changes	—	5,351	7,336
Benefit payments	(52,212)	(50,216)	(50,381)
Refunds	(469)	(562)	(938)
Net change in total pension liability	(13,243)	(9,134)	(3,113)
Total pension liability — beginning	640,424	649,558	652,671
Total pension liability — ending (a)	627,181	640,424	649,558
Plan fiduciary net position			
Contributions — member	391	506	579
Contributions — employer	1,114	1,439	1,575
Net investment income	(35,832)	111,382	78,746
Benefit payments	(52,212)	(50,216)	(50,381)
Refunds	(469)	(562)	(938)
Administrative expense	(195)	(199)	(209)
Net transfers with affiliated systems	(29,159)	(5,218)	(1,797)
Other*	—	—	—
Net change in plan fiduciary net position	(116,362)	57,132	27,575
Plan fiduciary net position — beginning	730,474	673,342	645,767
Plan fiduciary net position — ending (b)	614,112	730,474	673,342
Net pension liability/(asset) — ending (a-b)	\$ 13,069	\$ (90,050)	(23,784)
Plan fiduciary net position as a percentage of the total pension liability	97.9%	114.1%	103.7%
Projected covered payroll	\$ 11,477	\$ 9,173	10,445
Net pension liability/(asset) as a percentage of covered payroll	113.9%	(981.7)%	(227.7)%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Utah Retirement Systems

						State and School
2019	2018	2017	2016	2015	2014	2013
1,277	2,099	2,500	3,014	3,312	3,901	4,645
38,509	56,046	58,004	57,472	60,165	59,564	59,910
—	—	—	—	—	—	306
85,249	(8,786)	(13,814)	(9,183)	(10,456)	(14,374)	(12,500)
—	—	13,348	14,624	—	(1,319)	—
(50,282)	(58,831)	(57,291)	(57,321)	(54,738)	(53,838)	(52,551)
(1,350)	(1,041)	(910)	(1,045)	(592)	(1,139)	(1,067)
73,403	(10,513)	1,837	7,561	(2,309)	(7,205)	(1,257)
824,786	835,299	833,462	825,901	828,210	835,415	836,672
898,189	824,786	835,299	833,462	825,901	828,210	835,415
667	1,387	1,386	1,661	2,199	2,358	2,958
1,874	3,265	4,977	4,458	5,335	5,544	5,911
84,690	(2,908)	100,883	63,342	13,654	56,706	110,977
(50,282)	(58,831)	(57,291)	(57,321)	(54,738)	(53,838)	(52,551)
(1,350)	(1,041)	(910)	(1,045)	(592)	(1,139)	(1,067)
(211)	(293)	(295)	(289)	(302)	(315)	(308)
4,388	(16,512)	1,305	4,624	(19,565)	(27,864)	27,304
76,588	—	—	—	—	—	—
116,364	(74,933)	50,055	15,430	(54,009)	(18,548)	93,224
753,788	828,721	778,666	763,236	817,245	835,793	742,569
870,152	753,788	828,721	778,666	763,236	817,245	835,793
28,037	70,998	6,578	54,796	62,665	10,965	(378)
96.9%	91.4%	99.2%	93.4%	92.4%	98.7%	100.0%
12,599	21,003	24,453	29,656	33,836	39,203	43,578
222.5%	338.0%	26.9%	184.8%	185.2%	28.0%	(0.9)%

Continued on page 134.

Contributory Retirement System
Schedules of Changes in the Employers'
Net Pension Liability by Division (Continued)

Year Ended December 31

	(in thousands)		
Higher Education	2022	2021	2020
Total pension liability			
Service cost	\$ 352	398	476
Interest	10,651	10,918	10,570
Benefit changes	—	—	—
Differences between expected and actual experience	(5,410)	(3,995)	2,546
Assumption changes	—	1,349	1,341
Benefit payments	(10,354)	(10,129)	(9,626)
Refunds	—	(28)	(6)
Net change in total pension liability	(4,761)	(1,487)	5,301
Total pension liability — beginning	160,482	161,969	156,668
Total pension liability — ending (a)	155,721	160,482	161,969
Plan fiduciary net position	—	—	
Contributions — member	194	218	267
Contributions — employer	572	642	787
Net investment income	(9,044)	28,606	20,312
Benefit payments	(10,354)	(10,129)	(9,626)
Refunds	—	(28)	(6)
Administrative expense	(47)	(49)	(51)
Net transfers with affiliated systems	(13,327)	(13,821)	9,223
Other*	—	—	—
Net change in plan fiduciary net position	(32,006)	5,439	20,906
Plan fiduciary net position — beginning	188,651	183,212	162,306
Plan fiduciary net position — ending (b)	156,645	188,651	183,212
Net pension liability/(asset) — ending (a-b)	\$ (924)	(28,169)	(21,243)
Plan fiduciary net position as a percentage of the total pension liability	100.6%	117.6%	113.1%
Projected covered payroll	\$ 3,567	4,055	4,928
Net pension liability/(asset) as a percentage of covered payroll	(25.9)%	(694.7)%	(431.1)%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Higher Education

2019

528

16,753

—

(96,683)

—

(9,422)

(26)

(88,850)

245,518

156,668

327

919

20,434

(9,422)

(26)

(50)

2,329

(76,588)

(62,077)

224,383

162,306

(5,638)

103.6%

5,467

(103.1)%

Continued on page 136.

Contributory Retirement System

Schedules of Changes in the Employers'
Net Pension Liability by Division (Concluded)

Year Ended December 31

	(in thousands)		
Total All Divisions	2022	2021	2020
Total pension liability			
Service cost	\$ 2,433	2,786	3,175
Interest	82,901	85,305	85,198
Benefit changes	—	—	—
Differences between expected and actual experience	(7,940)	(21,487)	(5,463)
Assumption changes	—	10,667	11,312
Benefit payments	(94,365)	(91,712)	(89,890)
Refunds	(848)	(1,625)	(1,753)
Net change in total pension liability	(17,819)	(16,066)	2,579
Total pension liability — beginning	1,256,624	1,272,690	1,270,111
Total pension liability — ending (a)	1,238,805	1,256,624	1,272,690
Plan fiduciary net position			
Contributions — member	1,240	1,445	1,728
Contributions — employer	3,675	4,204	4,759
Net investment income	(70,701)	220,023	154,367
Benefit payments	(94,365)	(91,712)	(89,890)
Refunds	(848)	(1,625)	(1,753)
Administrative expense	(382)	(388)	(406)
Net transfers with affiliated systems	(69,481)	(20,349)	4,542
Other*			—
Net change in plan fiduciary net position	(230,862)	111,598	73,347
Plan fiduciary net position — beginning	1,447,237	1,335,639	1,262,292
Plan fiduciary net position — ending (b)	1,216,375	1,447,237	1,335,639
Net pension liability/(asset) — ending (a-b)	\$ 22,430	(190,613)	(62,949)
Plan fiduciary net position as a percentage of the total pension liability	98.2%	115.2%	104.9%
Projected covered payroll	\$ 26,521	26,782	30,748
Net pension liability/(asset) as a percentage of covered payroll	84.6%	(711.7)%	(204.7)%

*Represents adjustment to record the employers' prior year proportionate share of beginning of year Total Pension Liability and Plan Fiduciary Net Position of the state school fund to the new Higher Education division.

Utah Retirement Systems

						Total All Divisions
2019	2018	2017	2016	2015	2014	2013
3,536	4,044	4,801	5,673	8,672	9,580	10,997
86,205	87,297	90,124	91,894	95,463	93,819	93,750
—	—	—	(45,057)	—	—	721
(12,817)	(17,249)	(24,990)	(13,801)	(15,289)	(22,839)	(20,520)
—	—	22,108	22,909	—	(4,233)	—
(88,162)	(86,795)	(84,759)	(83,447)	(81,390)	(77,015)	(74,158)
(2,660)	(1,471)	(1,613)	(1,700)	(1,215)	(2,433)	(1,922)
(13,898)	(14,174)	5,671	(23,529)	6,241	(3,121)	8,868
1,284,009	1,298,183	1,292,512	1,316,041	1,309,800	1,312,921	1,304,053
1,270,111	1,284,009	1,298,183	1,292,512	1,316,041	1,309,800	1,312,921
1,950	2,455	2,675	3,420	4,771	5,461	6,376
5,433	6,027	7,946	8,188	11,719	12,954	12,874
163,935	(4,513)	155,949	97,693	21,251	87,577	169,510
(88,162)	(86,795)	(84,761)	(83,447)	(81,390)	(77,015)	(74,158)
(2,660)	(1,471)	(1,613)	(1,700)	(1,215)	(2,433)	(1,922)
(408)	(454)	(457)	(446)	(478)	(494)	(480)
9,775	(26,286)	(1,177)	(1,895)	(41,558)	(38,004)	33,094
—	—	—	—	—	—	—
89,863	(111,037)	78,562	21,813	(86,900)	(11,954)	145,294
1,172,429	1,283,466	1,204,904	1,183,091	1,269,991	1,281,945	1,136,651
1,262,292	1,172,429	1,283,466	1,204,904	1,183,091	1,269,991	1,281,945
7,817	111,580	14,717	87,608	132,950	39,809	30,976
99.4%	91.3%	98.9%	93.2%	89.9%	97.0%	97.6%
34,317	39,279	45,177	53,615	82,426	90,623	98,023
22.8%	284.1%	32.6%	163.4%	161.3%	43.9%	31.6%

Contributory Retirement System

Schedules of Net Pension Liability by Division

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Position as a Fiduciary Net Percentage of the Total Pension Liability	(5) Projected Covered Payroll	(6) Net Pension Liability (Asset) as a Percentage of Covered Payroll
Contributory Local Government	12/31/13	\$ 477,506	446,152	31,354	93.4%	\$ 54,445	57.6%
	12/31/14	481,590	452,746	28,844	94.0	51,420	56.1
	12/31/15	490,140	419,855	70,285	85.7	48,590	144.6
	12/31/16	459,050	426,238	32,812	92.9	23,959	137.0
	12/31/17	462,884	454,747	8,137	98.2	20,724	39.3
	12/31/18	459,223	418,643	40,580	91.2	18,276	222.0
	12/31/19	460,772	454,219	6,553	98.6	16,251	40.3
	12/31/20	461,163	479,085	(17,922)	103.9	15,375	(116.6)
	12/31/21	455,718	528,112	(72,394)	115.9	13,554	(534.1)
	12/31/22	455,903	445,618	10,285	97.7	11,477	89.6
Contributory State and School	12/31/13	\$ 835,415	835,793	(378)	100.0%	\$ 43,578	(0.9)%
	12/31/14	828,210	817,245	10,965	98.7	39,203	28.0
	12/31/15	825,901	763,236	62,665	92.4	33,836	185.2
	12/31/16	833,462	778,666	54,796	93.4	29,656	184.8
	12/31/17	835,299	828,719	6,580	99.2	24,453	26.9
	12/31/18	824,786	753,786	71,000	91.4	21,003	338.0
	12/31/19	652,671	645,767	6,904	98.9	12,599	54.8
	12/31/20	649,558	673,342	(23,784)	103.7	10,445	(227.7)
	12/31/21	640,424	730,474	(90,050)	114.1	9,173	(981.7)
	12/31/22	627,181	614,112	13,069	97.9	11,477	113.9
Contributory Higher Education	12/31/19	\$ 156,668	162,306	(5,638)	103.6%	\$ 5,467	(103.1)%
	12/31/20	161,969	183,212	(21,243)	113.1	4,928	431.0
	12/31/21	160,482	188,651	(28,169)	117.6	4,055	(694.7)
	12/31/22	155,721	156,645	(924)	100.6	3,567	(25.9)
Total Contributory Retirement System	12/31/13	\$ 1,312,921	1,281,945	30,976	97.6%	\$ 98,023	31.6%
	12/31/14	1,309,800	1,269,991	39,809	97.0	90,623	43.9
	12/31/15	1,316,041	1,183,091	132,950	89.9	82,426	161.3
	12/31/16	1,292,512	1,204,904	87,608	93.2	53,615	163.4
	12/31/17	1,298,183	1,283,466	14,717	98.9	45,177	32.6
	12/31/18	1,284,009	1,172,429	111,580	91.3	39,279	284.1
	12/31/19	1,270,111	1,262,292	7,819	99.4	34,317	22.8
	12/31/20	1,272,690	1,335,639	(62,949)	104.9	30,748	(204.7)
	12/31/21	1,256,624	1,447,237	(190,613)	115.2	26,782	(711.7)
	12/31/22	1,238,805	1,216,375	22,430	98.2	26,521	84.6

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Contributory Retirement System

Schedules of Employer Contributions by Division

(dollars in thousands)

System	Year Ended		Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contributi on Deficiency (Excess)	Projected Covered Payroll	Contributions as a Percentage of Covered Payroll**
Contributory Local Government	2013	\$	6,963	6,963	—	54,445	12.79%
	2014		7,410	7,410	—	51,420	14.41
	2015		6,384	6,384	—	48,590	13.14
	2016		3,730	3,730	—	23,959	15.57
	2017		2,969	2,969	—	20,724	14.33
	2018		2,762	2,762	—	18,276	15.11
	2019		2,640	2,640	—	16,251	16.25
	2020		2,397	2,397	—	15,375	15.59
	2021		2,123	2,123	—	13,554	15.66
	2022		1,989	1,989	—	11,477	17.33
Contributory State and School	2013	\$	5,911	5,911	—	43,578	13.56%
	2014		5,544	5,544	—	39,203	14.14
	2015		5,335	5,335	—	33,836	15.77
	2016		4,458	4,458	—	29,656	15.03
	2017		4,977	4,977	—	24,453	20.35
	2018		3,265	3,265	—	21,003	15.55
	2019		1,874	1,874	—	12,599	14.87
	2020		1,575	1,575	—	10,445	15.08
	2021		1,439	1,439	—	9,173	15.69
	2022		1,114	1,114	—	11,477	9.71
Contributory Higher Education	2019	\$	919	919	—	5,467	16.81%
	2020		787	787	—	4,928	15.97
	2021		642	642	—	4,055	15.83
	2022		572	572	—	3,567	16.04
Total Contributory Retirement System	2013	\$	12,874	12,874	—	98,023	13.13%
	2014		12,954	12,954	—	90,623	14.29
	2015		11,719	11,719	—	82,426	14.22
	2016		8,188	8,188	—	53,615	15.27
	2017		7,946	7,946	—	45,177	17.59
	2018		6,027	6,027	—	39,279	15.34
	2019		5,433	5,433	—	34,317	15.83
	2020		4,759	4,759	—	30,748	15.48
	2021		4,204	4,204	—	26,782	15.70
	2022		3,675	3,675	—	26,521	13.86

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

*Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

**Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Public Safety Retirement System

Schedules of Fiduciary Net Position —
Pension Trust Fund by Division

December 31, 2022

With Comparative Totals for December 31, 2021

	(in thousands)		
	State of Utah Public Safety	Other Division A (with Social Security)	Salt Lake City
Assets:			
Cash	\$ 2	4	2
Receivables:			
Member contributions	—	9	—
Employer contributions	1,818	1,782	491
Investments	12,226	14,656	2,998
Total receivables	14,044	16,447	3,489
Investments at fair value:			
Short-term securities	45,890	55,013	11,253
Debt securities	242,801	291,067	59,539
Equity investments	491,294	588,957	120,473
Absolute return	283,064	339,334	69,412
Private equity	207,845	249,162	50,967
Real assets	323,765	388,125	79,392
Total investments	1,594,659	1,911,658	391,036
Invested securities lending collateral	52,327	62,729	12,831
Property and equipment at cost, net of accumulated depreciation	688	825	169
Total assets	1,661,720	1,991,663	407,527
Liabilities:			
Securities lending liability	52,327	62,729	12,831
Disbursements in excess of cash balance	2,032	2,436	498
Compensated absences, post-employment benefits and insurance reserve	914	1,095	224
Investment accounts payable	22,061	26,446	5,410
Real estate liabilities	3,759	4,506	922
Total liabilities	81,093	97,212	19,885
Net position restricted for pensions	\$ 1,580,627	1,894,451	387,642

Utah Retirement Systems

	Ogden	Provo	Logan	Bountiful	Other Division B (without Social Security)	Total All Divisions	
						2022	2021
	2	2	2	2	4	20	20
	—	—	—	—	—	—	—
	—	—	—	—	—	9	9
	—	—	32	38	799	4,960	4,445
	630	520	290	199	5,374	36,893	72,624
	630	520	322	237	6,173	41,862	77,078
	—	—	—	—	—	—	—
	2,364	1,953	1,090	745	20,170	138,478	382,147
	12,506	10,332	5,765	3,943	106,720	732,673	618,631
	25,305	20,907	11,665	7,978	215,942	1,482,521	1,917,393
	14,580	12,046	6,721	4,597	124,417	854,171	779,421
	10,705	8,845	4,935	3,375	91,355	627,189	677,230
	16,676	13,778	7,688	5,258	142,306	976,988	787,794
	82,136	67,861	37,864	25,896	700,910	4,812,020	5,162,616
	2,695	2,227	1,242	850	23,000	157,901	100,777
	35	29	16	11	302	2,075	1,453
	85,498	70,639	39,446	26,996	730,389	5,013,878	5,341,944
	2,695	2,227	1,242	850	23,000	157,901	100,777
	105	86	48	33	893	6,131	3,931
	47	39	22	15	402	2,758	3,058
	1,136	939	524	358	9,696	66,570	117,448
	194	160	89	61	1,652	11,343	11,337
	4,177	3,451	1,925	1,317	35,643	244,703	236,551
	81,321	67,188	37,521	25,679	694,746	4,769,175	5,105,393

Public Safety Retirement System

Schedules of Changes in Fiduciary Net Position —
Pension Trust Fund by Division

December 31, 2022

With Comparative Totals for December 31, 2021

	(in thousands)		
	State of Utah Public Safety	Other Division A (with Social Security)	Salt Lake City
Additions:			
Contributions:			
Member	\$ 80	648	89
Employer	55,857	60,914	16,506
Total contributions	55,937	61,562	16,595
Investment income:			
Net appreciation in fair value of investments	(116,038)	(139,018)	(28,493)
Interest, dividends, and other investment income	32,084	38,438	7,878
Total income from investment activity	(83,954)	(100,580)	(20,615)
Less investment expenses	4,965	5,948	1,219
Net income from investment activity	(88,919)	(106,528)	(21,834)
Income from security lending activity	206	246	51
Less security lending expense	16	20	4
Net income from security lending activity	190	226	47
Net investment income	(88,729)	(106,302)	(21,787)
Transfers from affiliated systems	2,529	(3,817)	1,538
Total additions	(30,263)	(48,557)	(3,654)
Deductions:			
Retirement benefits	70,611	73,727	19,815
Cost-of-living benefits	15,081	14,023	4,812
Supplemental retirement benefits	62	50	22
Refunds	2	550	—
Administrative expenses	494	596	134
Total deductions	86,250	88,946	24,783
Increase from operations	(116,513)	(137,503)	(28,437)
Net position restricted for pensions beginning of year	1,697,140	2,031,954	416,079
Net position restricted for pensions end of year	\$ 1,580,627	1,894,451	387,642

Utah Retirement Systems

Ogden	Provo	Logan	Bountiful	Other Division B (without Social Security)	Total All Systems	
					2022	2021
—	—	—	—	220	1,037	1,421
3,517	2,552	1,133	1,244	26,812	168,535	152,524
3,517	2,552	1,133	1,244	27,032	169,572	153,945
(6,006)	(4,926)	(2,759)	(1,911)	(50,485)	(349,636)	678,975
1,661	1,362	763	528	13,959	96,673	86,504
(4,345)	(3,564)	(1,996)	(1,383)	(36,526)	(252,963)	765,479
257	211	118	82	2,160	14,960	10,206
(4,602)	(3,775)	(2,114)	(1,465)	(38,686)	(267,923)	755,273
11	9	5	3	89	620	966
1	1	—	—	7	49	94
10	8	5	3	82	571	872
(4,592)	(3,767)	(2,109)	(1,462)	(38,604)	(267,352)	756,145
(248)	624	441	(644)	4,980	5,403	7,956
(1,323)	(591)	(535)	(862)	(6,592)	(92,377)	918,046
4,324	3,329	1,638	1,211	27,017	201,672	196,237
1,134	741	398	331	3,445	39,965	37,282
2	3	—	—	—	139	153
—	—	—	—	—	552	32
28	23	12	9	217	1,513	1,466
5,488	4,096	2,048	1,551	30,679	243,841	235,170
(6,811)	(4,687)	(2,583)	(2,413)	(37,271)	(336,218)	682,876
88,132	71,875	40,104	28,092	732,017	5,105,393	4,422,517
81,321	67,188	37,521	25,679	694,746	4,769,175	5,105,393

Public Safety Retirement System

Schedules of Changes in the Employers' —
Net Pension Liability by Division

Year Ended December 31

	<i>(in thousands)</i>		
State of Utah Public Safety	2022	2021	2020
Total pension liability			
Service cost	\$ 21,663	21,973	23,422
Interest	107,780	104,937	101,080
Benefit changes	—	—	—
Differences between expected and actual experience	10,356	1,805	11,783
Assumption changes	—	19,055	562
Benefit payments	(85,754)	(82,374)	(78,883)
Refunds	(2)	(10)	—
Net change in total pension liability	54,043	65,386	57,964
Total pension liability — beginning	1,605,472	1,540,086	1,482,122
Total pension liability — ending (a)	1,659,515	1,605,472	1,540,086
Plan fiduciary net position			
Contributions — member	80	350	19
Contributions — employer	55,857	49,859	48,698
Net investment income	(88,729)	251,653	165,987
Benefit payments	(85,754)	(82,374)	(78,883)
Refunds	(2)	(10)	—
Administrative expense	(494)	(480)	(476)
Net transfers with affiliated systems	2,529	2,825	5,523
Net change in plan fiduciary net position	(116,513)	221,823	140,868
Plan fiduciary net position — beginning	1,697,140	1,475,317	1,334,449
Plan fiduciary net position — ending (b)	1,580,627	1,697,140	1,475,317
Net pension liability/(asset) — ending (a-b)	\$ 78,888	(91,668)	64,769
Plan fiduciary net position as a percentage of the total pension liability	95.2%	105.7%	95.8%
Projected covered payroll	\$ 92,226	96,178	102,302
Net pension liability/(asset) as a percentage of covered payroll	85.5%	(95.3)%	63.3%

Utah Retirement Systems

State of Utah Public Safety

2019	2018	2017	2016	2015	2014	2013
24,209	24,680	24,057	24,327	23,270	24,190	26,013
97,263	94,417	91,628	86,361	87,273	83,519	81,713
—	—	—	—	—	—	—
9,405	(7,483)	3,619	(3,139)	(14,298)	(12,067)	(2,099)
—	—	32,840	29,315	—	(17,596)	—
(72,218)	(68,479)	(64,451)	(62,622)	(59,271)	(55,075)	(52,432)
(30)	(113)	(66)	(8)	(18)	(12)	(2)
58,629	43,022	87,627	74,234	36,956	22,959	53,193
1,423,493	1,380,471	1,292,844	1,218,610	1,181,654	1,158,695	1,105,502
1,482,122	1,423,493	1,380,471	1,292,844	1,218,610	1,181,654	1,158,695
4	264	221	112	115	152	103
50,140	50,030	49,386	50,554	47,449	45,810	43,393
168,368	(4,419)	142,696	84,744	17,349	66,949	121,520
(72,218)	(68,479)	(64,451)	(62,622)	(59,271)	(55,075)	(52,432)
(30)	(113)	(66)	(8)	(18)	(12)	(2)
(459)	(487)	(470)	(432)	(431)	(434)	(413)
4,526	738	233	3,363	2,301	1,124	757
150,331	(22,466)	127,549	75,711	7,494	58,514	112,926
1,184,118	1,206,584	1,079,035	1,003,324	995,830	937,316	824,390
1,334,449	1,184,118	1,206,584	1,079,035	1,003,324	995,830	937,316
147,673	239,375	173,887	213,809	215,286	185,824	221,379
90.0%	83.2%	87.4%	83.5%	82.3%	84.3%	80.9%
105,488	107,407	107,557	108,759	108,967	113,111	115,960
140.0%	222.9%	161.7%	196.6%	197.6%	164.3%	190.9%

Continued on page 146.

Public Safety Retirement System
Schedules of Changes in the Employers'
Net Pension Liability by Division (Continued)

Year Ended December 31

	(in thousands)		
Other Division A (with Social Security)	2022	2021	2020
Total pension liability			
Service cost	\$ 29,532	30,248	31,161
Interest	131,611	126,738	120,561
Benefit changes	—	—	—
Differences between expected and actual experience	226	3,303	23,097
Assumption changes	—	25,009	(3,878)
Benefit payments	(87,800)	(85,997)	(77,145)
Refunds	(550)	(22)	(43)
Net change in total pension liability	73,019	99,279	93,753
Total pension liability — beginning	1,950,740	1,851,461	1,757,708
Total pension liability — ending (a)	2,023,759	1,950,740	1,851,461
Plan fiduciary net position			
Contributions — member	648	700	367
Contributions — employer	60,914	56,875	56,308
Net investment income	(106,302)	301,816	198,977
Benefit payments	(87,800)	(85,997)	(77,145)
Refunds	(550)	(22)	(43)
Administrative expense	(596)	(578)	(566)
Net transfers with affiliated systems	(3,817)	(9,277)	(6,607)
Net change in plan fiduciary net position	(137,503)	263,517	171,291
Plan fiduciary net position — beginning	2,031,954	1,768,437	1,597,146
Plan fiduciary net position — ending (b)	1,894,451	2,031,954	1,768,437
Net pension liability/(asset) — ending (a-b)	\$ 129,308	(81,214)	83,024
Plan fiduciary net position as a percentage of the total pension liability	93.6%	104.2%	95.5%
Projected covered payroll	\$ 125,569	132,316	135,602
Net pension liability/(asset) as a percentage of covered payroll	103.0%	(61.4)%	61.2%

Utah Retirement Systems

Other Division A (with Social Security)						
2019	2018	2017	2016	2015	2014	2013
30,869	31,875	30,590	31,202	29,942	30,473	32,564
115,292	110,510	107,017	98,935	98,538	93,276	90,791
—	—	—	—	—	—	—
4,368	(3,170)	(21,479)	(6,830)	(12,388)	(16,141)	(25,616)
—	—	50,755	48,303	—	(21,812)	—
(72,527)	(67,207)	(60,128)	(57,652)	(54,909)	(51,394)	(48,824)
(4)	(85)	(158)	(175)	(208)	(115)	(97)
77,998	71,923	106,597	113,783	60,975	34,287	48,818
1,679,710	1,607,787	1,501,190	1,387,407	1,326,432	1,292,145	1,243,327
1,757,708	1,679,710	1,607,787	1,501,190	1,387,407	1,326,432	1,292,145
454	545	366	515	701	597	714
55,243	53,057	53,112	52,359	51,677	49,156	46,421
202,090	(5,312)	171,806	102,156	20,899	80,565	146,201
(72,527)	(67,207)	(60,128)	(57,652)	(54,909)	(51,394)	(48,824)
(4)	(85)	(158)	(175)	(208)	(115)	(97)
(540)	(569)	(542)	(496)	(485)	(482)	(458)
(10,021)	(8,899)	(11,797)	(6,727)	(10,067)	(6,061)	(3,111)
174,695	(28,470)	152,659	89,980	7,608	72,266	140,846
1,422,451	1,450,921	1,298,262	1,208,282	1,200,674	1,128,408	987,562
1,597,146	1,422,451	1,450,921	1,298,262	1,208,282	1,200,674	1,128,408
160,562	257,259	156,866	202,928	179,125	125,758	163,737
90.9%	84.7%	90.2%	86.5%	87.1%	90.5%	87.3%
134,008	138,269	137,270	139,677	141,681	143,924	146,190
119.8%	186.1%	114.3%	145.3%	126.4%	87.4%	112.0%

Continued on page 148.

Public Safety Retirement System**Schedules of Changes in the Employers'
Net Pension Liability by Division** *(Continued)*

Year Ended December 31

	<i>(in thousands)</i>		
Salt Lake City	2022	2021	2020
Total pension liability			
Service cost	\$ 6,140	6,147	6,567
Interest	29,225	28,605	27,597
Benefit changes	—	—	—
Differences between expected and actual experience	3,313	(771)	3,340
Assumption changes	—	5,194	(243)
Benefit payments	(24,649)	(23,561)	(21,549)
Refunds	—	—	—
Net change in total pension liability	14,029	15,614	15,712
Total pension liability — beginning	435,897	420,283	404,571
Total pension liability — ending (a)	449,926	435,897	420,283
Plan fiduciary net position			
Contributions — member	89	3	89
Contributions — employer	16,506	15,350	15,608
Net investment income	(21,787)	61,655	40,543
Benefit payments	(24,649)	(23,561)	(21,549)
Refunds	—	—	—
Administrative expense	(134)	(131)	(130)
Net transfers with affiliated systems	1,538	1,835	1,175
Net change in plan fiduciary net position	(28,437)	55,151	35,736
Plan fiduciary net position — beginning	416,079	360,928	325,192
Plan fiduciary net position — ending (b)	387,642	416,079	360,928
Net pension liability/(asset) — ending (a-b)	\$ 62,284	19,818	59,355
Plan fiduciary net position as a percentage of the total pension liability	86.2%	95.5%	85.9%
Projected covered payroll	\$ 25,993	26,735	28,518
Net pension liability/(asset) as a percentage of covered payroll	239.6%	74.1%	208.1%

Utah Retirement Systems

						Salt Lake City
2019	2018	2017	2016	2015	2014	2013
6,665	6,763	6,704	6,316	5,963	5,878	6,209
26,741	25,881	24,937	23,099	23,023	22,171	21,719
—	—	—	—	—	—	—
344	532	2,143	2,815	2,063	(1,430)	(3,743)
—	—	11,737	11,313	—	(4,551)	—
(21,229)	(20,225)	(18,745)	(17,681)	(17,076)	(16,398)	(15,737)
—	(39)	(2)	—	—	—	(15)
12,521	12,912	26,774	25,862	13,973	5,670	8,433
392,050	379,138	352,364	326,502	312,529	306,859	298,426
404,571	392,050	379,138	352,364	326,502	312,529	306,859
—	—	—	8	—	4	13
15,609	15,294	14,899	15,260	14,100	13,519	12,426
41,115	(1,075)	34,603	20,441	4,178	16,113	29,378
(21,229)	(20,225)	(18,745)	(17,681)	(17,076)	(16,398)	(15,737)
—	(39)	(2)	—	—	—	(15)
(126)	(135)	(129)	(118)	(116)	(116)	(110)
801	2,259	1,642	1,369	657	620	447
36,170	(3,921)	32,268	19,279	1,743	13,742	26,402
289,022	292,943	260,675	241,396	239,653	225,911	199,509
325,192	289,022	292,943	260,675	241,396	239,653	225,911
79,379	103,028	86,195	91,689	85,106	72,876	80,948
80.4%	73.7%	77.3%	74.0%	73.9%	76.7%	73.6%
28,862	29,356	30,142	28,331	28,275	27,821	28,016
275.0%	351.0%	286.0%	323.6%	301.0%	261.9%	288.9%

Continued on page 150.

Public Safety Retirement System**Schedules of Changes in the Employers'
Net Pension Liability by Division** *(Continued)*

Year Ended December 31

	<i>(in thousands)</i>		
Ogden	2022	2021	2020
Total pension liability			
Service cost	\$ 830	817	915
Interest	6,065	5,983	5,999
Benefit changes	—	—	—
Differences between expected and actual experience	1,447	(8)	(1,792)
Assumption changes	—	1,061	(53)
Benefit payments	(5,460)	(5,365)	(5,119)
Refunds	—	—	—
Net change in total pension liability	2,882	2,488	(50)
Total pension liability — beginning	90,855	88,367	88,417
Total pension liability — ending (a)	93,737	90,855	88,367
Plan fiduciary net position			
Contributions — member	—	—	—
Contributions — employer	3,517	2,701	2,711
Net investment income	(4,592)	13,109	8,725
Benefit payments	(5,460)	(5,365)	(5,119)
Refunds	—	—	—
Administrative expense	(28)	(28)	(28)
Net transfers with affiliated systems	(248)	746	284
Net change in plan fiduciary net position	(6,811)	11,163	6,573
Plan fiduciary net position — beginning	88,132	76,969	70,396
Plan fiduciary net position — ending (b)	81,321	88,132	76,969
Net pension liability/(asset) — ending (a-b)	\$ 12,416	2,723	11,398
Plan fiduciary net position as a percentage of the total pension liability	86.8%	97.0%	87.1%
Projected covered payroll	\$ 3,499	3,559	3,975
Net pension liability/(asset) as a percentage of covered payroll	354.8%	76.5%	286.7%

Utah Retirement Systems

						Ogden
2019	2018	2017	2016	2015	2014	2013
1,004	1,143	1,200	1,139	1,164	1,170	1,304
5,849	5,838	5,549	5,232	5,359	5,185	5,028
—	—	—	—	—	—	—
378	(1,850)	2,044	(288)	(1,153)	559	(713)
—	—	2,724	2,544	—	(822)	—
(4,949)	(4,846)	(4,286)	(4,208)	(4,090)	(3,956)	(3,864)
—	—	—	—	—	—	—
2,282	285	7,231	4,419	1,280	2,136	1,755
86,135	85,850	78,619	74,200	72,920	70,784	69,029
88,417	86,135	85,850	78,619	74,200	72,920	70,784
—	—	—	—	56	—	—
2,743	2,970	3,072	3,147	2,729	2,791	2,525
8,983	(240)	7,843	4,696	976	3,803	6,973
(4,949)	(4,846)	(4,286)	(4,208)	(4,090)	(3,956)	(3,864)
—	—	—	—	—	—	—
(28)	(30)	(29)	(27)	(26)	(27)	(26)
(224)	106	(128)	(74)	(66)	107	535
6,525	(2,040)	6,472	3,534	(421)	2,718	6,143
63,871	65,911	59,439	55,905	56,326	53,608	47,465
70,396	63,871	65,911	59,439	55,905	56,326	53,608
18,021	22,264	19,939	19,180	18,295	16,594	17,176
79.6%	74.2%	76.8%	75.6%	75.3%	77.2%	75.7%
4,337	4,940	5,372	5,082	5,517	5,518	5,831
415.5%	450.7%	371.2%	377.4%	331.6%	300.7%	294.6%

Continued on page 152.

Public Safety Retirement System

Schedules of Changes in the Employers'
Net Pension Liability by Division (Continued)

Year Ended December 31

Provo	(in thousands)		
	2022	2021	2020
Total pension liability			
Service cost	\$ 936	1,021	1,027
Interest	5,113	4,920	4,618
Benefit changes	—	—	—
Differences between expected and actual experience	(2,015)	910	2,353
Assumption changes	—	920	(85)
Benefit payments	(4,073)	(3,685)	(3,443)
Refunds	—	—	—
Net change in total pension liability	(39)	4,086	4,470
Total pension liability — beginning	76,212	72,126	67,656
Total pension liability — ending (a)	76,173	76,212	72,126
Plan fiduciary net position			
Contributions — member	—	112	—
Contributions — employer	2,552	2,363	2,420
Net investment income	(3,767)	10,788	7,146
Benefit payments	(4,073)	(3,685)	(3,443)
Refunds	—	—	—
Administrative expense	(23)	(23)	(22)
Net transfers with affiliated systems	624	(1,181)	19
Net change in plan fiduciary net position	(4,687)	8,374	6,120
Plan fiduciary net position — beginning	71,875	63,501	57,381
Plan fiduciary net position — ending (b)	67,188	71,875	63,501
Net pension liability/(asset) — ending (a-b)	\$ 8,985	4,337	8,625
Plan fiduciary net position as a percentage of the total pension liability	88.2%	94.3%	88.0%
Projected covered payroll	\$ 3,955	4,423	4,417
Net pension liability/(asset) as a percentage of covered payroll	227.2%	98.1%	195.3%

Utah Retirement Systems

						Provo
2019	2018	2017	2016	2015	2014	2013
1,036	1,091	1,122	1,134	1,099	1,141	1,181
4,496	4,323	4,282	3,972	3,916	3,748	3,680
—	—	—	—	—	—	—
(314)	458	(1,391)	147	636	(638)	561
—	—	1,895	1,960	—	(859)	—
(3,468)	(3,240)	(3,089)	(2,701)	(2,739)	(2,503)	(2,281)
—	—	—	—	—	(11)	(204)
1,750	2,632	2,819	4,512	2,912	878	2,937
65,906	63,274	60,455	55,943	53,031	52,153	49,216
67,656	65,906	63,274	60,455	55,943	53,031	52,153
217	—	—	—	—	—	—
2,335	2,266	2,258	2,403	2,314	2,255	2,158
7,225	(190)	6,141	3,660	749	2,877	5,204
(3,468)	(3,240)	(3,089)	(2,701)	(2,739)	(2,503)	(2,281)
—	—	—	—	—	(11)	(204)
(21)	(23)	(22)	(20)	(20)	(19)	(19)
299	97	16	(39)	66	145	16
6,587	(1,090)	5,304	3,303	370	2,744	4,874
50,794	51,884	46,580	43,277	42,907	40,163	35,289
57,381	50,794	51,884	46,580	43,277	42,907	40,163
10,275	15,112	11,390	13,875	12,666	10,124	11,990
84.8%	77.1%	82.0%	77.0%	77.4%	80.9%	77.0%
4,468	4,699	5,023	5,065	5,213	5,424	5,295
230.0%	321.6%	226.8%	273.9%	243.0%	186.7%	226.4%

Continued on page 154.

Public Safety Retirement System**Schedules of Changes in the Employers'
Net Pension Liability by Division** *(Continued)*

Year Ended December 31

	<i>(in thousands)</i>		
Logan	2022	2021	2020
Total pension liability			
Service cost	\$ 444	430	446
Interest	2,692	2,604	2,467
Benefit changes	—	—	—
Differences between expected and actual experience	(445)	274	1,022
Assumption changes	—	482	(99)
Benefit payments	(2,036)	(1,894)	(1,824)
Refunds	—	—	—
Net change in total pension liability	655	1,896	2,012
Total pension liability — beginning	40,092	38,196	36,184
Total pension liability — ending (a)	40,747	40,092	38,196
Plan fiduciary net position			
Contributions — member	—	—	—
Contributions — employer	1,133	1,077	1,055
Net investment income	(2,109)	5,957	3,925
Benefit payments	(2,036)	(1,894)	(1,824)
Refunds	—	—	—
Administrative expense	(12)	(12)	(12)
Net transfers with affiliated systems	441	41	214
Net change in plan fiduciary net position	(2,583)	5,169	3,358
Plan fiduciary net position — beginning	40,104	34,935	31,577
Plan fiduciary net position — ending (b)	37,521	40,104	34,935
Net pension liability/(asset) — ending (a-b)	\$ 3,226	(12)	3,261
Plan fiduciary net position as a percentage of the total pension liability	92.1%	100.0%	91.5%
Projected covered payroll	\$ 1,877	1,854	1,926
Net pension liability/(asset) as a percentage of covered payroll	171.9%	(0.6)%	169.3%

Utah Retirement Systems

						Logan
2019	2018	2017	2016	2015	2014	2013
486	482	465	488	485	524	580
2,412	2,389	2,364	2,220	2,201	2,110	2,029
—	—	—	—	—	—	—
(181)	(736)	(766)	(264)	278	232	(701)
—	—	1,056	1,103	—	(420)	—
(1,990)	(1,625)	(1,547)	(1,516)	(1,442)	(1,366)	(1,320)
—	—	—	—	—	—	—
727	510	1,572	2,031	1,522	1,080	588
35,457	34,947	33,375	31,344	29,822	28,742	28,154
36,184	35,457	34,947	33,375	31,344	29,822	28,742
—	—	—	—	—	35	49
1,053	1,068	1,034	1,052	1,044	989	944
4,034	(107)	3,456	2,068	432	1,671	3,047
(1,990)	(1,625)	(1,547)	(1,516)	(1,442)	(1,366)	(1,320)
—	—	—	—	—	—	—
(11)	(12)	(12)	(11)	(11)	(11)	(10)
(156)	185	36	(52)	(247)	100	88
2,930	(491)	2,967	1,541	(224)	1,418	2,798
28,647	29,138	26,171	24,630	24,854	23,436	20,638
31,577	28,647	29,138	26,171	24,630	24,854	23,436
4,607	6,810	5,809	7,204	6,714	4,968	5,306
87.3%	80.8%	83.4%	78.4%	78.6%	83.3%	81.5%
2,108	2,079	2,088	2,183	2,306	2,459	2,584
218.5%	327.6%	278.2%	330.0%	291.2%	202.0%	205.3%

Continued on page 156.

Public Safety Retirement System**Schedules of Changes in the Employers'
Net Pension Liability by Division** *(Continued)*

Year Ended December 31

	<i>(in thousands)</i>		
Bountiful	2022	2021	2020
Total pension liability			
Service cost	\$ 405	390	416
Interest	2,020	2,021	1,966
Benefit changes	—	—	—
Differences between expected and actual experience	(574)	(787)	(5)
Assumption changes	—	341	35
Benefit payments	(1,542)	(1,586)	(1,613)
Refunds	—	—	—
Net change in total pension liability	309	379	799
Total pension liability — beginning	30,061	29,682	28,883
Total pension liability — ending (a)	30,370	30,061	29,682
Plan fiduciary net position			
Contributions — member	—	—	—
Contributions — employer	1,244	1,090	1,032
Net investment income	(1,462)	4,161	2,825
Benefit payments	(1,542)	(1,586)	(1,613)
Refunds	—	—	—
Administrative expense	(9)	(9)	(9)
Net transfers with affiliated systems	(644)	36	(666)
Net change in plan fiduciary net position	(2,413)	3,692	1,569
Plan fiduciary net position — beginning	28,092	24,400	22,831
Plan fiduciary net position — ending (b)	25,679	28,092	24,400
Net pension liability/(asset) — ending (a-b)	\$ 4,691	1,969	5,282
Plan fiduciary net position as a percentage of the total pension liability	84.6%	93.4%	82.2%
Projected covered payroll	\$ 1,728	1,688	1,780
Net pension liability/(asset) as a percentage of covered payroll	271.5%	116.6%	296.7%

Utah Retirement Systems

						Bountiful
2019	2018	2017	2016	2015	2014	2013
402	394	411	409	380	383	390
1,903	1,859	1,845	1,711	1,682	1,635	1,580
—	—	—	—	—	—	—
166	(92)	(453)	383	652	297	(147)
—	—	880	830	—	(229)	—
(1,521)	(1,570)	(1,514)	(1,435)	(1,358)	(1,419)	(1,369)
—	—	—	—	—	—	—
950	591	1,169	1,898	1,356	667	454
27,933	27,342	26,173	24,275	22,919	22,252	21,798
28,883	27,933	27,342	26,173	24,275	22,919	22,252
—	—	—	—	—	—	—
1,033	964	911	943	883	822	716
2,889	(78)	2,498	1,493	310	1,220	2,271
(1,521)	(1,570)	(1,514)	(1,435)	(1,358)	(1,419)	(1,369)
—	—	—	—	—	—	—
(9)	(10)	(9)	(9)	(9)	(9)	(8)
36	35	323	35	35	14	99
2,428	(659)	2,209	1,027	(139)	628	1,709
20,403	21,062	18,853	17,826	17,965	17,337	15,628
22,831	20,403	21,062	18,853	17,826	17,965	17,337
6,052	7,530	6,280	7,320	6,449	4,954	4,915
79.0%	73.0%	77.0%	72.0%	73.4%	78.4%	77.9%
1,707	1,675	1,814	1,810	1,776	1,795	1,749
354.5%	449.6%	346.2%	404.4%	363.1%	276.0%	281.0%

Continued on page 158.

Public Safety Retirement System**Schedules of Changes in the Employers' Net Pension Liability by Division** (Concluded)

Year Ended December 31

	<i>(in thousands)</i>		
Other Division B (without Social Security)	2022	2021	2020
Total pension liability			
Service cost	\$ 13,955	13,528	13,945
Interest	47,125	44,907	40,933
Benefit changes	—	—	—
Differences between expected and actual experience	14,390	3,951	32,401
Assumption changes	—	9,046	(2,404)
Benefit payments	(30,462)	(29,210)	(25,713)
Refunds	—	—	(53)
Net change in total pension liability	45,008	42,222	59,109
Total pension liability — beginning	696,205	653,983	594,874
Total pension liability — ending (a)	741,213	696,205	653,983
Plan fiduciary net position			
Contributions — member	220	256	82
Contributions — employer	26,812	23,209	22,680
Net investment income	(38,604)	107,006	68,597
Benefit payments	(30,462)	(29,210)	(25,713)
Refunds	—	—	(53)
Administrative expense	(217)	(205)	(199)
Net transfers with affiliated systems	4,980	12,931	7,422
Net change in plan fiduciary net position	(37,271)	113,987	72,816
Plan fiduciary net position — beginning	732,017	618,030	545,214
Plan fiduciary net position — ending (b)	694,746	732,017	618,030
Net pension liability/(asset) — ending (a-b)	\$ 46,467	(35,812)	35,953
Plan fiduciary net position as a percentage of the total pension liability	93.7%	105.1%	94.5%
Projected covered payroll	\$ 59,091	58,863	60,399
Net pension liability/(asset) as a percentage of covered payroll	78.6%	(60.8)%	59.5%

Utah Retirement Systems

Other Division B (without Social Security)						
2019	2018	2017	2016	2015	2014	2013
13,558	13,868	13,723	13,828	13,049	12,922	13,495
37,691	34,932	32,196	28,192	26,988	25,159	23,425
—	—	—	—	—	—	—
20,125	13,782	13,242	16,534	7,046	3,963	3,230
—	—	16,483	15,005	—	(6,121)	—
(24,021)	(21,222)	(19,110)	(16,693)	(14,502)	(12,652)	(11,659)
(42)	(191)	—	—	(307)	(61)	(149)
47,311	41,169	56,534	56,866	32,274	23,210	28,342
547,563	506,394	449,860	392,994	360,720	337,510	309,168
594,874	547,563	506,394	449,860	392,994	360,720	337,510
181	86	206	195	33	47	379
22,311	21,452	21,142	21,381	20,828	20,246	20,161
67,953	(1,713)	52,874	29,769	5,761	21,024	35,969
(24,021)	(21,222)	(19,110)	(16,693)	(14,502)	(12,652)	(11,659)
(42)	(191)	—	—	(307)	(61)	(149)
(182)	(184)	(169)	(147)	(135)	(129)	(117)
10,251	12,461	15,601	8,826	11,344	6,697	5,845
76,451	10,689	70,544	43,331	23,022	35,172	50,429
468,763	458,074	387,530	344,199	321,177	286,005	235,576
545,214	468,763	458,074	387,530	344,199	321,177	286,005
49,660	78,800	48,320	62,330	48,795	39,543	51,505
91.7%	85.6%	90.5%	86.1%	87.6%	89.0%	84.7%
58,727	60,050	61,516	61,501	61,436	60,698	60,373
84.6%	131.2%	78.5%	101.3%	79.4%	65.1%	85.3%

Continued on page 160.

Public Safety Retirement System

Schedules of Changes in the Employers'
Net Pension Liability by Division (Concluded)

Year Ended December 31

Total All Divisions	(in thousands)		
	2022	2021	2020
Total pension liability			
Service cost	\$ 73,905	74,554	77,899
Interest	331,631	320,715	305,221
Benefit changes	—	—	—
Differences between expected and actual experience	26,698	8,677	72,199
Assumption changes	—	61,108	(6,165)
Benefit payments	(241,776)	(233,672)	(215,289)
Refunds	(552)	(32)	(96)
Net change in total pension liability	189,906	231,350	233,769
Total pension liability — beginning	4,925,534	4,694,184	4,460,415
Total pension liability — ending (a)	5,115,440	4,925,534	4,694,184
Plan fiduciary net position		—	
Contributions — member	1,037	1,421	557
Contributions — employer	168,535	152,524	150,512
Net investment income	(267,352)	756,145	496,725
Benefit payments	(241,776)	(233,672)	(215,289)
Refunds	(552)	(32)	(96)
Administrative expense	(1,513)	(1,466)	(1,442)
Net transfers with affiliated systems	5,403	7,956	7,364
Net change in plan fiduciary net position	(336,218)	682,876	438,331
Plan fiduciary net position — beginning	5,105,393	4,422,517	3,984,186
Plan fiduciary net position — ending (b)	4,769,175	5,105,393	4,422,517
Net pension liability/(asset) — ending (a-b)	\$ 346,265	(179,859)	271,667
Plan fiduciary net position as a percentage of the total pension liability	93.2%	103.7%	94.2%
Projected covered payroll	\$ 313,938	325,616	338,919
Net pension liability/(asset) as a percentage of covered payroll	110.3%	(55.2)%	80.2%

Utah Retirement Systems

						Total All Divisions
2019	2018	2017	2016	2015	2014	2013
78,229	80,296	78,272	78,843	75,352	76,681	81,736
291,647	280,149	269,818	249,722	248,980	236,803	229,965
—	—	—	—	—	—	—
34,291	1,441	(3,041)	9,358	(17,164)	(25,225)	(29,228)
—	—	118,370	110,373	—	(52,410)	—
(201,923)	(188,414)	(172,870)	(164,508)	(155,387)	(144,763)	(137,486)
(76)	(428)	(226)	(183)	(533)	(199)	(467)
202,168	173,044	290,323	283,605	151,248	90,887	144,520
4,258,247	4,085,203	3,794,880	3,511,275	3,360,027	3,269,140	3,124,620
4,460,415	4,258,247	4,085,203	3,794,880	3,511,275	3,360,027	3,269,140
856	895	793	830	905	835	1,258
150,467	147,101	145,814	147,099	141,024	135,588	128,744
502,657	(13,134)	421,917	249,027	50,654	194,222	350,563
(201,923)	(188,414)	(172,870)	(164,508)	(155,387)	(144,763)	(137,486)
(76)	(428)	(226)	(183)	(533)	(199)	(467)
(1,376)	(1,450)	(1,382)	(1,260)	(1,233)	(1,227)	(1,161)
5,512	6,982	5,926	6,701	4,023	2,746	4,676
456,117	(48,448)	399,972	237,706	39,453	187,202	346,127
3,528,069	3,576,517	3,176,545	2,938,839	2,899,386	2,712,184	2,366,057
3,984,186	3,528,069	3,576,517	3,176,545	2,938,839	2,899,386	2,712,184
476,229	730,178	508,686	618,335	572,436	460,641	556,956
89.3%	82.9%	87.5%	83.7%	83.7%	86.3%	83.0%
339,705	348,475	350,782	352,408	355,171	360,750	365,998
140.2%	209.5%	145.0%	175.5%	161.2%	127.7%	152.2%

Public Safety Retirement System

Schedules of Net Pension Liability by Division

(dollars in thousands)

System	Date	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Position as a Fiduciary Net Percentage of the Total Pension Liability	(5) Projected Covered Payroll	(6) Net Pension Liability (Asset) as a Percentage of Covered Payroll
Public Safety State of Utah	12/31/13	\$ 1,158,695	937,316	221,379	80.9%	\$ 115,960	190.9%
	12/31/14	1,181,654	995,830	185,824	84.3	113,111	164.3
	12/31/15	1,218,610	1,003,324	215,286	82.3	108,967	197.6
	12/31/16	1,292,844	1,079,035	213,809	83.5	108,759	196.6
	12/31/17	1,380,471	1,206,584	173,887	87.4	107,557	161.7
	12/31/18	1,423,493	1,184,118	239,375	83.2	107,407	222.9
	12/31/19	1,482,122	1,334,449	147,673	90.0	105,488	140.0
	12/31/20	1,540,086	1,475,317	64,769	95.8	102,302	63.3
	12/31/21	1,605,472	1,697,140	(91,668)	105.7	96,178	(95.3)
	12/31/22	1,659,515	1,580,627	78,888	95.2	92,226	85.5
Public Safety Other Division A (with Social Security)	12/31/13	\$ 1,292,145	1,128,408	163,737	87.3%	\$ 146,190	112.0%
	12/31/14	1,326,432	1,200,674	125,758	90.5	143,924	87.4
	12/31/15	1,387,407	1,208,282	179,125	87.1	141,681	126.4
	12/31/16	1,501,190	1,298,262	202,928	86.5	139,677	145.3
	12/31/17	1,607,787	1,450,921	156,866	90.2	137,270	114.3
	12/31/18	1,679,710	1,422,451	257,259	84.7	138,269	186.1
	12/31/19	1,757,708	1,597,146	160,562	90.9	134,008	119.8
	12/31/20	1,851,461	1,768,437	83,024	95.5	135,602	61.2
	12/31/21	1,950,740	2,031,954	(81,214)	104.2	132,316	(61.4)
	12/31/22	2,023,759	1,894,451	129,308	93.6	125,569	103.0
Public Safety Salt Lake City	12/31/13	\$ 306,859	225,911	80,948	73.6%	\$ 28,016	288.9%
	12/31/14	312,529	239,653	72,876	76.7	27,821	261.9
	12/31/15	326,502	241,396	85,106	73.9	28,275	301.0
	12/31/16	352,364	260,675	91,689	74.0	28,331	323.6
	12/31/17	379,138	292,943	86,195	77.3	30,142	286.0
	12/31/18	392,050	289,022	103,028	73.7	29,356	351.0
	12/31/19	404,571	325,192	79,379	80.4	28,862	275.0
	12/31/20	420,283	360,928	59,355	85.9	28,518	208.1
	12/31/21	435,897	416,079	19,818	95.5	26,735	74.1
	12/31/22	449,926	387,642	62,284	86.2	25,993	239.6
Public Safety Ogden	12/31/13	\$ 70,784	53,608	17,176	75.7%	\$ 5,831	294.6%
	12/31/14	72,920	56,326	16,594	77.2	5,518	300.8
	12/31/15	74,200	55,905	18,295	75.3	5,517	331.6
	12/31/16	78,619	59,439	19,180	75.6	5,082	377.4
	12/31/17	85,850	65,911	19,939	76.8	5,372	371.2
	12/31/18	86,135	63,871	22,264	74.2	4,940	450.7
	12/31/19	88,417	70,396	18,021	79.6	4,337	415.5
	12/31/20	88,367	76,969	11,398	87.1	3,975	286.7
	12/31/21	90,855	88,132	2,723	97.0	3,559	76.5
	12/31/22	93,737	81,321	12,416	86.8	3,499	354.8
Public Safety Provo	12/31/13	\$ 52,153	40,163	11,990	77.0%	\$ 5,295	226.4%
	12/31/14	53,031	42,907	10,124	80.9	5,424	186.7
	12/31/15	55,943	43,277	12,666	77.4	5,213	243.0
	12/31/16	60,455	46,580	13,875	77.0	5,065	273.9
	12/31/17	63,274	51,884	11,390	82.0	5,023	226.8
	12/31/18	65,906	50,794	15,112	77.1	4,699	321.6
	12/31/19	67,656	57,381	10,275	84.8	4,468	230.0
	12/31/20	72,126	63,501	8,625	88.0	4,417	195.3
	12/31/21	76,212	71,875	4,337	94.3	4,423	98.1
	12/31/22	76,173	67,188	8,985	88.2	3,955	227.2

Public Safety Retirement System

Schedules of Net Pension by Division (Concluded)

(dollars in thousands)

System	Date		(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Position as a Fiduciary Net Percentage of the Total Pension Liability	(5) Projected Covered Payroll	(6) Net Pension Liability (Asset) as a Percentage of Covered Payroll
Public Safety Logan	12/31/13	\$	28,742	23,436	5,306	81.5%	\$ 2,584	205.3%
	12/31/14		29,822	24,854	4,968	83.3	2,459	202.0
	12/31/15		31,344	24,630	6,714	78.6	2,306	291.2
	12/31/16		33,375	26,171	7,204	78.4	2,183	330.0
	12/31/17		34,947	29,138	5,808	83.4	2,088	278.4
	12/31/18		35,457	28,647	6,810	80.8	2,079	327.6
	12/31/19		36,184	31,577	4,607	87.3	2,108	218.5
	12/31/20		38,196	34,935	3,261	91.5	1,926	169.3
	12/31/21		40,092	40,104	(12)	100.0	1,854	(0.6)
	12/31/22		40,747	37,521	3,226	92.1	1,877	171.9
Public Safety Bountiful	12/31/13	\$	22,252	17,337	4,915	77.9%	\$ 1,749	281.0%
	12/31/14		22,919	17,965	4,954	78.4	1,795	275.9
	12/31/15		24,275	17,826	6,449	73.4	1,776	363.1
	12/31/16		26,173	18,853	7,320	72.0	1,810	404.4
	12/31/17		27,342	21,062	6,280	77.0	1,814	346.2
	12/31/18		27,933	20,403	7,530	73.0	1,675	449.6
	12/31/19		28,883	22,831	6,052	79.0	1,707	354.5
	12/31/20		29,682	24,400	5,282	82.2	1,780	296.7
	12/31/21		30,061	28,092	1,969	93.4	1,688	116.6
	12/31/22		30,370	25,679	4,691	84.6	1,728	271.5
Public Safety Other Division B (without Social Security)	12/31/13	\$	337,510	286,005	51,505	84.7%	\$ 60,373	85.3%
	12/31/14		360,720	321,177	39,543	89.0	60,698	65.1
	12/31/15		392,994	344,199	48,795	87.6	61,436	79.4
	12/31/16		449,860	387,530	62,330	86.1	61,501	101.3
	12/31/17		506,394	458,074	48,320	90.5	61,516	78.5
	12/31/18		547,563	468,763	78,800	85.6	60,050	131.2
	12/31/19		594,874	545,214	49,660	91.7	58,727	84.6
	12/31/20		653,983	618,030	35,953	94.5	60,399	59.5
	12/31/21		696,205	732,017	(35,812)	105.1	58,863	(60.8)
	12/31/22		741,213	694,746	46,467	93.7	59,091	78.6
Total Public Safety Retirement System	12/31/13	\$	3,269,140	2,712,184	556,956	83.0%	\$ 365,998	152.2%
	12/31/14		3,360,027	2,899,386	460,641	86.3	360,750	127.7
	12/31/15		3,511,275	2,938,839	572,436	83.7	355,171	161.2
	12/31/16		3,794,880	3,176,545	618,335	83.7	352,408	175.5
	12/31/17		4,085,203	3,576,517	508,686	87.5	350,782	145.0
	12/31/18		4,258,247	3,528,069	730,178	82.9	348,475	209.5
	12/31/19		4,460,415	3,984,186	476,229	89.3	339,705	140.2
	12/31/20		4,694,184	4,422,517	271,667	94.2	338,919	80.2
	12/31/21		4,925,534	5,105,393	(179,859)	103.7	336,809	(53.4)
	12/31/22		5,115,440	4,769,175	346,265	93.2	313,938	110.3

Public Safety Retirement System

Schedules of Employer Contributions by Division

(dollars in thousands)

System	Year Ended	Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Payroll	Contributions as a Percentage of Covered Payroll**
Public Safety State of Utah	2013	\$ 43,393	43,393	—	115,960	37.42%
	2014	45,810	45,810	—	113,111	40.50
	2015	47,449	47,449	—	108,967	43.54
	2016	50,554	50,554	—	108,759	46.48
	2017	49,386	49,386	—	107,557	45.92
	2018	50,030	50,030	—	107,407	46.58
	2019	50,140	50,140	—	105,488	47.53
	2020	48,698	48,698	—	102,302	47.60
	2021	49,859	49,859	—	96,178	51.84
	2022	55,857	55,857	—	92,226	60.57
Public Safety Other Division A (with Social Security)	2013	\$ 46,421	46,421	—	146,190	31.75%
	2014	49,156	49,156	—	143,924	34.15
	2015	51,677	51,677	—	141,681	36.47
	2016	52,359	52,359	—	139,677	37.49
	2017	53,112	53,112	—	137,270	38.69
	2018	53,057	53,057	—	138,269	38.37
	2019	55,243	55,243	—	134,008	41.22
	2020	56,308	56,308	—	135,602	41.52
	2021	56,875	56,875	—	132,316	42.98
	2022	60,914	60,914	—	125,569	48.51
Public Safety Salt Lake City	2013	\$ 12,426	12,426	—	28,016	44.35%
	2014	13,519	13,519	—	27,821	48.59
	2015	14,100	14,100	—	28,276	49.87
	2016	15,260	15,260	—	28,331	53.86
	2017	14,899	14,899	—	30,142	49.43
	2018	15,294	15,294	—	29,356	52.40
	2019	15,609	15,609	—	28,862	54.08
	2020	15,608	15,608	—	28,518	54.73
	2021	15,350	15,350	—	26,735	57.42
	2022	16,506	16,506	—	25,993	63.50
Public Safety Ogden	2013	\$ 2,525	2,525	—	5,831	43.30%
	2014	2,791	2,791	—	5,518	50.58
	2015	2,729	2,729	—	5,517	49.47
	2016	3,147	3,147	—	5,082	61.92
	2017	3,072	3,072	—	5,372	57.19
	2018	2,970	2,970	—	4,940	60.12
	2019	2,743	2,743	—	4,337	63.25
	2020	2,711	2,711	—	3,975	68.20
	2021	2,701	2,701	—	3,559	75.89
	2022	3,517	3,517	—	3,499	100.51
Public Safety Provo	2013	\$ 2,158	2,158	—	5,295	40.76%
	2014	2,255	2,255	—	5,424	41.57
	2015	2,314	2,314	—	5,213	44.39
	2016	2,403	2,403	—	5,065	47.44
	2017	2,258	2,258	—	5,023	44.95
	2018	2,266	2,266	—	4,699	48.22
	2019	2,335	2,335	—	4,468	52.26
	2020	2,420	2,420	—	4,417	54.79
	2021	2,363	2,363	—	4,423	53.43
	2022	2,552	2,552	—	3,955	64.53

*Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

**Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Public Safety Retirement System

Schedules of Employer Contributions by Division (Concluded)

(dollars in thousands)

System	Year Ended	Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution*	Contribution Deficiency (Excess)	Projected Covered Payroll	Contributions as a Percentage of Covered Payroll**
Public Safety Logan	2013	\$ 944	944	—	2,584	36.53%
	2014	989	989	—	2,459	40.42
	2015	1,044	1,044	—	2,306	45.27
	2016	1,052	1,052	—	2,183	48.19
	2017	1,034	1,034	—	2,088	49.52
	2018	1,068	1,068	—	2,079	51.37
	2019	1,053	1,053	—	2,108	49.95
	2020	1,055	1,055	—	1,926	54.78
	2021	1,077	1,077	—	1,854	58.09
	2022	1,133	1,133	—	1,877	60.36
Public Safety Bountiful	2013	\$ 716	716	—	1,749	40.94%
	2014	822	822	—	1,795	45.79
	2015	883	883	—	1,776	49.72
	2016	943	943	—	1,810	52.10
	2017	911	911	—	1,814	50.22
	2018	964	964	—	1,675	57.55
	2019	1,033	1,033	—	1,707	60.52
	2020	1,032	1,032	—	1,780	57.98
	2021	1,090	1,090	—	1,688	64.57
	2022	1,244	1,244	—	1,728	71.99
Public Safety Other Division B (without Social Security)	2013	\$ 20,161	20,161	—	60,373	33.39%
	2014	20,246	20,246	—	60,698	33.36
	2015	20,828	20,828	—	61,436	33.90
	2016	21,381	21,381	—	61,501	34.77
	2017	21,142	21,142	—	61,516	34.37
	2018	21,452	21,452	—	60,050	35.72
	2019	22,311	22,311	—	58,727	37.99
	2020	22,680	22,680	—	60,399	37.55
	2021	23,209	23,209	—	58,863	39.43
	2022	26,812	26,812	—	59,091	45.37
Total Public Safety Retirement System	2013	\$ 128,744	128,744	—	365,998	35.18%
	2014	135,588	135,588	—	360,750	37.59
	2015	141,024	141,024	—	355,172	39.71
	2016	147,099	147,099	—	352,408	41.74
	2017	145,814	145,814	—	350,783	41.57
	2018	147,101	147,101	—	348,475	42.21
	2019	150,467	150,467	—	339,705	44.29
	2020	150,512	150,512	—	338,919	44.41
	2021	152,524	152,524	—	336,809	45.29
	2022	168,535	168,535	—	313,938	53.68

*Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

**Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

Firefighters Retirement System

Schedules of Fiduciary Net Position —
Pension Trust Fund by Division

December 31, 2022

With Comparative Totals for December 31, 2021

	(in thousands)			
	Division A (with Social Security)	Division B (without Social Security)	2022	2021
Assets:				
Cash	\$ 1	1	2	2
Receivables:				
Member contributions	208	437	645	466
Employer contributions	50	163	213	191
Fire Insurance tax	31	74	105	111
Investments	2,599	10,445	13,044	25,609
Total receivables	2,888	11,119	14,007	26,377
Investments at fair value:				
Short-term securities	9,756	39,206	48,962	134,753
Debt securities	51,616	207,438	259,054	218,143
Equity investments	104,442	419,740	524,182	676,115
Absolute return	60,176	241,838	302,014	274,840
Private equity	44,185	177,573	221,758	238,806
Real assets	68,828	276,611	345,439	277,793
Total investments	339,003	1,362,406	1,701,409	1,820,450
Invested securities lending collateral	11,124	44,706	55,830	35,536
Property and equipment at cost, net of accumulated depreciation	146	588	734	512
Total assets	353,162	1,418,820	1,771,982	1,882,877
Liabilities:				
Securities lending liability	11,124	44,706	55,830	35,536
Disbursements in excess of cash balance	432	1,736	2,168	1,386
Compensated absences, post-employment benefits and insurance reserve	194	781	975	1,079
Investment accounts payable	4,908	18,848	23,756	41,415
Real estate liabilities	799	3,211	4,010	3,998
Total liabilities	17,457	69,282	86,739	83,414
Net position restricted for pensions	\$ 335,705	1,349,538	1,685,243	1,799,463

Firefighters Retirement System

Schedules of Changes in Fiduciary Net Position —
Pension Trust Fund by Division

Year Ended December 31, 2022

With Comparative Totals for Year Ended December 31, 2021

	(in thousands)			
	Division A (with Social Security)	Division B (without Social Security)	Total All Divisions	
			2022	2021
Additions:				
Contributions:				
Member	\$ 5,352	13,917	19,269	18,985
Employer	1,453	5,020	6,473	7,499
Fire insurance tax	6,714	16,024	22,738	21,136
Total contributions	13,519	34,961	48,480	47,620
Investment income:				
Net appreciation in fair value of investments	(24,218)	(99,202)	(123,420)	238,789
Interest, dividends, and other investment income	6,696	27,429	34,125	30,423
Total income from investment activity	(17,522)	(71,773)	(89,295)	269,212
Less investment expenses	1,036	4,244	5,280	3,589
Net income from investment activity	(18,558)	(76,017)	(94,575)	265,623
Income from security lending activity	43	176	219	340
Less security lending expense	3	14	17	32
Net income from security lending activity	40	162	202	308
Net investment income	(18,518)	(75,855)	(94,373)	265,931
Transfers from affiliated systems	3,539	(26)	3,513	2,983
Total additions	(1,460)	(40,920)	(42,380)	316,534
Deductions:				
Retirement benefits	9,292	48,248	57,540	53,951
Cost-of-living benefits	1,424	11,931	13,355	12,427
Supplemental retirement benefits	8	116	124	130
Refunds	26	344	370	176
Administrative expenses	89	362	451	435
Transfers to affiliated systems	—	—	—	1,146
Total deductions	10,839	61,001	71,840	68,265
Increase from operations	(12,299)	(101,921)	(114,220)	248,269
Net position restricted for pensions beginning of year	348,004	1,451,459	1,799,463	1,551,194
Net position restricted for pensions end of year	\$ 335,705	1,349,538	1,685,243	1,799,463

Firefighters Retirement System

Schedules of Changes in the Employers' —
Net Pension Liability by Division

Year Ended December 31

Division A (with Social Security)	(in thousands)		
	2022	2021	2020
Total pension liability			
Service cost	\$ 8,780	8,412	8,331
Interest	19,776	18,524	17,095
Benefit changes	—	—	—
Differences between expected and actual experience	2,247	1,087	2,979
Assumption changes	—	3,910	809
Benefit payments	(10,724)	(9,027)	(8,227)
Refunds	(26)	(123)	(14)
Net change in total pension liability	20,053	22,783	20,973
Total pension liability — beginning	289,682	266,899	245,926
Total pension liability — ending (a)	309,735	289,682	266,899
Plan fiduciary net position			
Contributions — member	5,352	5,039	4,920
Contributions — employer	1,453	1,544	1,507
Fire insurance tax	6,714	6,241	5,679
Net investment income	(18,518)	50,699	32,430
Benefit payments	(10,724)	(9,027)	(8,227)
Refunds	(26)	(123)	(14)
Administrative expense	(89)	(84)	(80)
Net transfers with affiliated systems	3,539	(1,146)	318
Net change in plan fiduciary net position	(12,299)	53,143	36,533
Plan fiduciary net position — beginning	348,004	294,861	258,328
Plan fiduciary net position — ending (b)	335,705	348,004	294,861
Net pension liability/(asset) — ending (a-b)	\$ (25,970)	(58,322)	(27,962)
Plan fiduciary net position as a percentage of the total pension liability	108.4%	120.1%	110.5%
Projected covered payroll	\$ 33,301	32,594	31,970
Net pension liability/(asset) as a percentage of covered payroll	(78.0)%	(178.9)%	(87.5)%

Utah Retirement Systems

							Other Division A (with Social Security)
2019	2018	2017	2016	2015	2014	2013	
8,128	7,756	7,085	7,020	6,584	6,636	7,158	
15,962	14,704	13,905	12,644	12,290	11,387	10,840	
—	—	—	—	—	—	—	
227	3,268	(1,851)	(271)	(985)	(1,199)	(1,812)	
—	—	6,170	4,636	—	(4,028)	—	
(7,933)	(7,558)	(6,670)	(6,121)	(6,243)	(5,432)	(4,889)	
(61)	(58)	(124)	(174)	(190)	(72)	—	
16,323	18,112	18,515	17,734	11,456	7,292	11,297	
229,603	211,491	192,976	175,242	163,786	156,494	145,197	
245,926	229,603	211,491	192,976	175,242	163,786	156,494	
4,817	4,638	4,457	4,214	4,063	3,983	3,977	
1,475	1,319	1,147	1,124	1,055	888	745	
11,858	2,395	262	2,581	4,170	3,398	2,748	
31,078	(797)	25,677	15,014	2,982	11,118	19,648	
(7,933)	(7,558)	(6,670)	(6,121)	(6,243)	(5,432)	(4,889)	
(61)	(58)	(124)	(174)	(190)	(72)	—	
(74)	(76)	(70)	(62)	(60)	(58)	(54)	
550	(982)	(706)	135	1,784	664	796	
41,710	(1,119)	23,973	16,711	7,561	14,489	22,971	
216,618	217,737	193,764	177,053	169,492	155,003	132,032	
258,328	216,618	217,737	193,764	177,053	169,492	155,003	
(12,402)	12,985	(6,246)	(788)	(1,811)	(5,706)	1,491	
105.0%	94.3%	103.0%	100.4%	101.0%	103.5%	99.0%	
31,104	29,680	27,603	27,266	26,672	26,873	26,521	
(39.9)%	43.8%	(22.6)%	(2.9)%	(6.8)%	(21.2)%	5.6%	

Continued on page 170.

Firefighters Retirement System
Schedules of Changes in the
Employers' Net Pension Liability (Continued)

Year Ended December 31

	(in thousands)		
Division B (without Social Security)	2022	2021	2020
Total pension liability			
Service cost	\$ 21,253	20,939	21,222
Interest	79,547	76,679	73,248
Benefit changes	—	—	—
Differences between expected and actual experience	2,541	4,909	5,850
Assumption changes	—	14,376	5,344
Benefit payments	(60,295)	(57,481)	(54,615)
Refunds	(344)	(53)	(145)
Net change in total pension liability	42,702	59,369	50,904
Total pension liability — beginning	1,180,967	1,121,598	1,070,694
Total pension liability — ending (a)	1,223,669	1,180,967	1,121,598
Plan fiduciary net position			
Contributions — member	13,917	13,946	13,809
Contributions — employer	5,020	5,955	5,983
Fire insurance tax	16,024	14,895	14,600
Net investment income	(75,855)	215,232	141,388
Benefit payments	(60,295)	(57,481)	(54,615)
Refunds	(344)	(53)	(145)
Administrative expense	(362)	(351)	(345)
Net transfers with affiliated systems	(26)	2,983	2,433
Net change in plan fiduciary net position	(101,921)	195,126	123,108
Plan fiduciary net position — beginning	1,451,459	1,256,333	1,133,225
Plan fiduciary net position — ending (b)	1,349,538	1,451,459	1,256,333
Net pension liability/(asset) — ending (a-b)	\$ (125,869)	(270,492)	(134,735)
Plan fiduciary net position as a percentage of the total pension liability	110.3%	122.9%	112.0%
Projected covered payroll	\$ 81,401	82,041	82,488
Net pension liability/(asset) as a percentage of covered payroll	(154.6)%	(329.7)%	(163.3)%

Utah Retirement Systems

Other Division B (without Social Security)						
2019	2018	2017	2016	2015	2014	2013
21,153	21,622	21,690	21,632	20,598	20,630	22,419
70,627	68,115	66,481	62,690	62,922	60,103	59,419
—	—	—	—	—	—	—
(664)	(2,331)	(7,365)	(5,254)	(7,274)	(13,878)	(11,271)
—	—	25,187	20,936	—	(16,344)	—
(51,914)	(49,882)	(48,123)	(45,981)	(43,428)	(42,278)	(39,858)
(194)	(74)	(387)	(292)	(338)	(221)	(106)
39,008	37,450	57,483	53,731	32,480	8,012	30,603
1,031,686	994,236	936,753	883,022	850,542	842,530	811,927
1,070,694	1,031,686	994,236	936,753	883,022	850,542	842,530
13,884	13,667	14,003	14,515	14,112	14,317	14,348
5,968	5,702	5,568	5,830	5,635	4,626	2,749
30,001	6,352	961	7,988	13,048	10,756	8,537
143,063	(3,712)	121,059	72,732	14,952	57,952	106,037
(51,914)	(49,882)	(48,123)	(45,981)	(43,428)	(42,278)	(39,858)
(194)	(74)	(387)	(292)	(338)	(221)	(106)
(331)	(351)	(338)	(312)	(311)	(312)	(301)
1,477	2,899	1,965	1,476	789	3,049	506
141,954	(25,399)	94,708	55,956	4,459	47,889	91,912
991,271	1,016,670	921,962	866,006	861,547	813,658	721,746
1,133,225	991,271	1,016,670	921,962	866,006	861,547	813,658
(62,531)	40,415	(22,434)	14,791	17,016	(11,005)	28,872
105.8%	96.1%	102.3%	98.4%	98.1%	101.3%	96.6%
82,226	83,907	85,350	85,056	84,461	84,432	84,220
(76.0)%	48.2%	(26.3)%	17.4%	20.1%	(13.0)%	34.3%

Continued on page 172.

Firefighters Retirement System
Schedules of Changes in the
Employers' Net Pension Liability (Concluded)

Year Ended December 31

Total All Divisions	<i>(in thousands)</i>		
	2022	2021	2020
Total pension liability			
Service cost	\$ 30,033	\$ 29,351	29,553
Interest	99,323	95,203	90,343
Benefit changes	—	—	—
Differences between expected and actual experience	4,788	5,996	8,829
Assumption changes	—	18,286	6,153
Benefit payments	(71,019)	(66,508)	(62,842)
Refunds	(370)	(176)	(159)
Net change in total pension liability	62,755	82,152	71,877
Total pension liability — beginning	1,470,649	1,388,497	1,316,620
Total pension liability — ending (a)	1,533,404	1,470,649	1,388,497
Plan fiduciary net position			
Contributions — member	19,269	18,985	18,729
Contributions — employer	6,473	7,499	7,490
Fire insurance tax	22,738	21,136	20,279
Net investment income	(94,373)	265,931	173,818
Benefit payments	(71,019)	(66,508)	(62,842)
Refunds	(370)	(176)	(159)
Administrative expense	(451)	(435)	(425)
Net transfers with affiliated systems	3,513	1,837	2,751
Net change in plan fiduciary net position	(114,220)	248,269	159,641
Plan fiduciary net position — beginning	1,799,463	1,551,194	1,391,553
Plan fiduciary net position — ending (b)	1,685,243	1,799,463	1,551,194
Net pension liability/(asset) — ending (a-b)	\$ (151,839)	\$ (328,814)	(162,697)
Plan fiduciary net position as a percentage of the total pension liability	109.9%	122.4%	111.7%
Projected covered payroll	\$ 114,702	\$ 114,635	114,458
Net pension liability/(asset) as a percentage of covered payroll	(132.4)%	(286.8)%	(142.1)%

Utah Retirement Systems

						Total All Divisions
2019	2018	2017	2016	2015	2014	2013
29,281	29,378	28,775	28,652	27,182	27,266	29,577
86,589	82,819	80,386	75,334	75,212	71,490	70,259
—	—	—	—	—	—	—
(437)	937	(9,216)	(5,525)	(8,259)	(15,077)	(13,083)
—	—	31,357	25,572	—	(20,372)	—
(59,847)	(57,440)	(54,793)	(52,102)	(49,671)	(47,710)	(44,747)
(255)	(132)	(511)	(466)	(528)	(293)	(106)
55,331	55,562	75,998	71,465	43,936	15,304	41,900
1,261,289	1,205,727	1,129,729	1,058,264	1,014,328	999,024	957,124
1,316,620	1,261,289	1,205,727	1,129,729	1,058,264	1,014,328	999,024
18,701	18,305	18,460	18,729	18,175	18,300	18,325
7,443	7,021	6,715	6,954	6,690	5,514	3,494
41,859	8,747	1,223	10,569	17,218	14,154	11,285
174,141	(4,509)	146,736	87,746	17,934	69,070	125,685
(59,847)	(57,440)	(54,793)	(52,102)	(49,671)	(47,710)	(44,747)
(255)	(132)	(511)	(466)	(528)	(293)	(106)
(405)	(427)	(408)	(374)	(371)	(370)	(355)
2,027	1,917	1,259	1,611	2,573	3,713	1,302
183,664	(26,518)	118,681	72,667	12,020	62,378	114,883
1,207,889	1,234,407	1,115,726	1,043,059	1,031,039	968,661	853,778
1,391,553	1,207,889	1,234,407	1,115,726	1,043,059	1,031,039	968,661
(74,933)	53,400	(28,680)	14,003	15,205	(16,711)	30,363
105.7%	95.8%	102.4%	98.8%	98.6%	101.6%	97.0%
113,330	113,587	112,953	112,322	111,133	111,305	110,741
(66.1)%	47.0%	(25.4)%	12.5%	13.7%	(15.0)%	27.4%

Firefighters Retirement System

Schedules of Net Pension Liability by Division

(dollars in thousands)

System	Date		(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Position as a Fiduciary Net Percentage of the Total Pension Liability	(5) Projected Covered Payroll	(6) Net Pension Liability (Asset) as a Percentage of Covered Payroll
Firefighters Division A (with Social Security)	12/31/13	\$	156,494	155,003	1,491	99.0%	\$ 26,521	5.6%
	12/31/14		163,786	169,492	(5,706)	103.5	26,873	(21.2)
	12/31/15		175,242	177,053	(1,811)	101.0	26,672	(6.8)
	12/31/16		192,976	193,764	(788)	100.4	27,266	(2.9)
	12/31/17		211,491	217,737	(6,246)	103.0	27,603	(22.6)
	12/31/18		229,603	216,618	12,985	94.3	29,680	43.8
	12/31/19		245,926	258,328	(12,402)	105.0	31,104	(39.9)
	12/31/20		266,899	294,861	(27,962)	110.5	31,970	(87.5)
	12/31/21		289,682	348,004	(58,322)	120.1	32,594	(178.9)
12/31/22		309,735	335,705	(25,970)	108.4	33,301	(78.0)	
Firefighters Division B (without Social Security)	12/31/13	\$	842,530	813,658	28,872	96.6%	\$ 84,220	34.3%
	12/31/14		850,542	861,547	(11,005)	101.3	84,432	(13.0)
	12/31/15		883,022	866,006	17,016	98.1	84,461	20.1
	12/31/16		936,753	921,962	14,791	98.4	85,056	17.4
	12/31/17		994,236	1,016,670	(22,434)	102.3	85,350	(26.3)
	12/31/18		1,031,686	991,271	40,415	96.1	83,907	48.2
	12/31/19		1,070,694	1,133,225	(62,531)	105.8	82,226	(76.0)
	12/31/20		1,121,598	1,256,333	(134,735)	112.0	82,488	(163.3)
	12/31/21		1,180,967	1,451,459	(270,492)	122.9	82,041	(329.7)
12/31/22		1,223,669	1,349,538	(125,869)	110.3	81,401	(154.6)	
Total Firefighters Retirement System	12/31/13	\$	999,024	968,661	30,363	97.0%	\$ 110,741	27.4%
	12/31/14		1,014,328	1,031,039	(16,711)	101.6	111,305	(15.0)
	12/31/15		1,058,264	1,043,059	15,205	98.6	111,133	13.7
	12/31/16		1,129,729	1,115,726	14,003	98.8	112,322	12.5
	12/31/17		1,205,727	1,234,407	(28,680)	102.4	112,953	(25.4)
	12/31/18		1,261,289	1,207,889	53,400	95.8	113,587	47.0
	12/31/19		1,316,620	1,391,553	(74,933)	105.7	113,330	(66.1)
	12/31/20		1,388,497	1,551,194	(162,697)	111.7	114,458	(142.1)
	12/31/21		1,470,649	1,799,463	(328,814)	122.4	114,635	(286.8)
12/31/22		1,533,404	1,685,243	(151,839)	109.9	114,702	(132.4)	

Firefighters Retirement System

Schedules of Employer Contributions by Division

(dollars in thousands)

System	Year Ended		Actuarial Determined Contribution*	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Projected Covered Payroll	Contributions as a Percentage of Covered Payroll**
Firefighters Division A (with Social Security)	2013	\$	3,493	3,493	—	26,521	13.17%
	2014		4,286	4,286	—	26,873	15.95
	2015		5,225	5,225	—	26,672	19.59
	2016		3,705	3,705	—	27,266	13.59
	2017		1,409	1,409	—	27,603	5.10
	2018		3,714	3,714	—	29,680	12.51
	2019		13,333	13,333	—	31,104	42.87
	2020		7,186	7,186	—	31,970	22.48
	2021		7,785	7,785	—	32,594	23.88
	2022		8,167	8,167	—	33,301	24.52
Firefighters Division B (without Social Security)	2013	\$	11,286	11,286	—	84,220	13.40%
	2014		15,382	15,382	—	84,432	18.22
	2015		18,683	18,683	—	84,461	22.12
	2016		13,818	13,818	—	85,056	16.25
	2017		6,529	6,529	—	85,350	7.65
	2018		12,054	12,054	—	83,907	14.37
	2019		35,969	35,969	—	82,226	43.74
	2020		20,583	20,583	—	82,488	24.95
	2021		20,850	20,850	—	82,041	25.41
	2022		21,044	21,044	—	81,401	25.85
Total Firefighters Retirement System	2013	\$	14,779	14,779	—	110,741	13.35%
	2014		19,668	19,668	—	111,305	17.67
	2015		23,908	23,908	—	111,133	21.51
	2016		17,523	17,523	—	112,322	15.60
	2017		7,938	7,938	—	112,953	7.03
	2018		15,768	15,768	—	113,587	13.88
	2019		49,302	49,302	—	113,330	43.50
	2020		27,769	27,769	—	114,458	24.26
	2021		28,635	28,635	—	114,635	24.98
	2022		29,211	29,211	—	114,702	25.47

*Contributions for the Tier 1 Systems include contributions received on the Tier 2 payroll to help finance the unfunded actuarial accrued liability of the Tier 1 Systems.

**Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative issues.

All Retirement Systems

Schedules of Administrative and Investment Expenses

Year Ended December 31, 2022

	(in thousands)
	Total
Professional services	
Salaries and wages	\$ 19,038
Employee benefits	7,750
Total personal services	26,788
Professional services:	
Audit	525
Actuarial services	287
General counsel	481
Banking services	36
Security handling expense	1,170
Investment advisor fees	117,406
Other consulting services	4,663
Total professional services	124,568
Communications:	
Telephone	213
Postage	475
Total communications	688
Rentals:	
Office space	1,254
Office equipment rental	45
Total rentals	1,299
Miscellaneous:	
Data processing	1,340
Professional development	514
Contractual services	228
Supplies and maintenance	181
Insurance and bonding premiums	1,009
Office supplies	58
Other	361
Depreciation expense	805
Total miscellaneous	4,496
Total administrative and investment expenses	\$ 157,839

	(in thousands)
	Total
Allocation of administrative expenses:	
Noncontributory Retirement System	\$ 10,357
Contributory Retirement System	382
Public Safety Retirement System	1,513
Firefighters Retirement System	451
Judges Retirement System	88
Utah Governors and Legislators Retirement Plan	4
Tier 2 Public Employees Contributory Retirement System	345
Tier 2 Public Safety and Firefighter Contributory Retirement System	54
401(k) Plan	7,839
457(b) Plan	848
Roth IRA Plan	321
Traditional IRA Plan	226
Total administrative expenses	22,428
Investment administrative expense	18,002
Investment advisor fees:	
Investment Fund	113,924
401(k) Plan	2,936
457(b) Plan	316
Roth IRA Plan	127
Traditional IRA Plan	106
Total investment expenses	135,411
Total administrative and investment expense allocations	\$ 157,839

Investment Section

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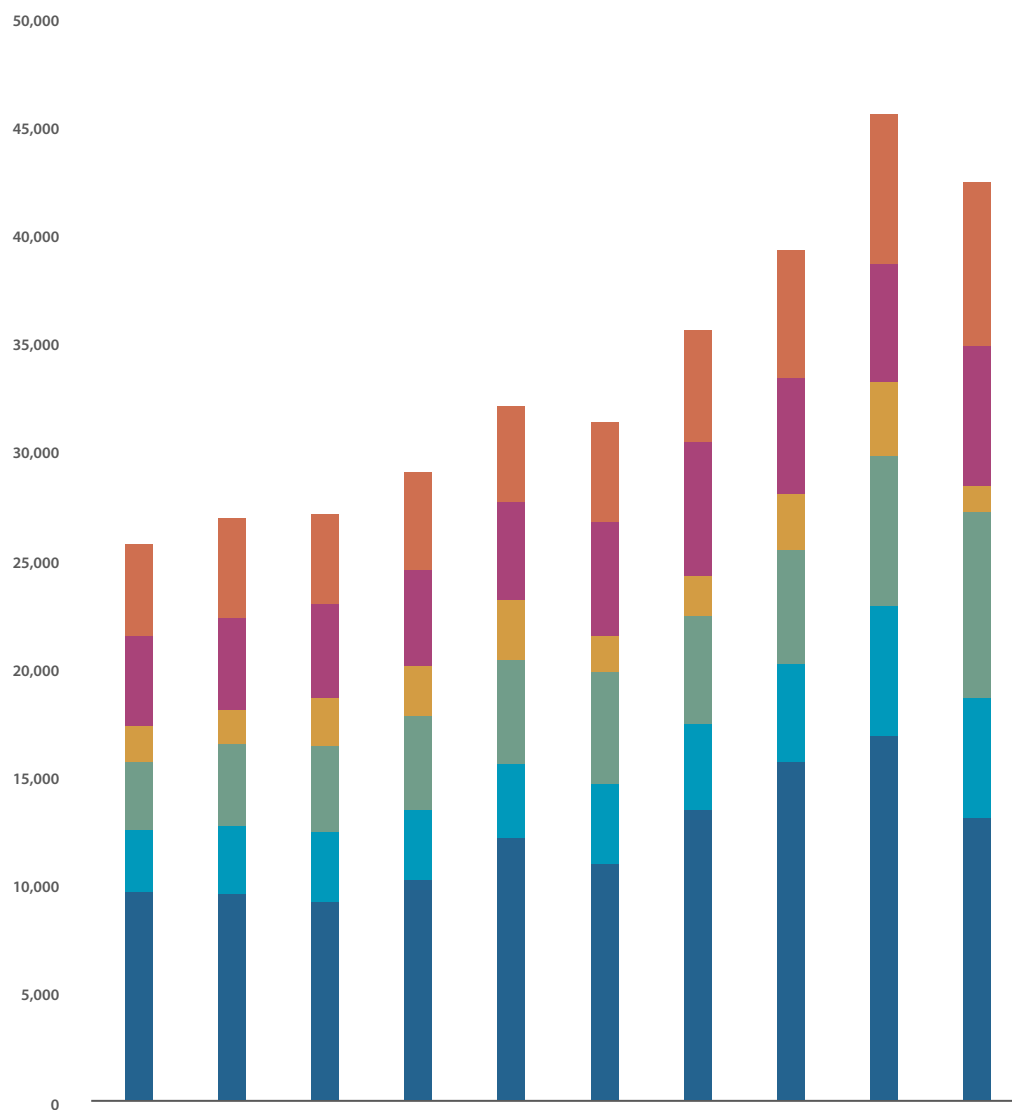
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Investment Professionals —
Defined Contribution Plans

Utah Retirement Systems

10-Year Investment Comparison

(in millions)



(in millions)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Absolute return	\$ 4,298	4,643	4,141	4,509	4,459	4,598	5,184	5,921	6,875	7,531
Debt securities	4,094	4,213	4,282	4,356	4,557	5,313	6,176	5,319	5,457	6,460
Short-term securities	1,711	1,572	2,230	2,392	2,759	1,591	1,856	2,632	3,371	1,221
Real assets	3,147	3,780	4,025	4,269	4,745	5,206	4,948	5,232	6,949	8,614
Private equity	2,840	3,170	3,215	3,291	3,451	3,661	4,013	4,535	5,974	5,530
Equities	9,675	9,577	9,193	10,200	12,155	11,007	13,436	15,669	16,913	13,071
Totals	\$ 25,765	26,955	27,086	29,017	32,126	31,376	35,613	39,308	45,538	42,425

Schedules may not foot due to rounding.

Defined Benefit Investments

Report on Investment Activity

UTAH STATE RETIREMENT BOARD
UTAH RETIREMENT SYSTEMS
560 East 200 South
Salt Lake City, Utah 84102-2044
801-366-7700
800-365-8772
801-366-7734 FAX

DANIEL D. ANDERSEN
EXECUTIVE DIRECTOR

May 31, 2023

Utah State Retirement Board
560 East 200 South
Salt Lake City, UT 84102-2044

Dear Members of Utah Retirement Systems:

Turbulent financial markets and destabilizing geopolitical events provided a challenging backdrop for my first full year as URS Chief Investment Officer. Specifically, the U.S. Federal Reserve's most aggressive monetary policy tightening in 40 years triggered sharp declines across global stock and bond markets while Russia's brutal invasion of neighboring Ukraine exacerbated both economic uncertainties and inflationary pressures. Nonetheless, the deliberate "defense wins Super Bowls" positioning of the URS investment program proved resilient and limited the Defined Benefit fund's losses relative to other peer funds and market averages.

Year in Review

Financial assets (e.g., stocks and bonds) realized widespread losses in 2022 as the Fed's unrelenting series of rate hikes undercut previously rosy projections of corporate earnings and fixed income cash flows. After over a decade of low-to-zero interest rates, the "easy money" era that had prevailed almost uninterrupted since the 2008-2009 Great Financial Crisis came to an abrupt and definitive end last year when the Fed initiated what would become seven successive rate hikes. This campaign resulted in a 4.25% cumulative increase in short-term interest rates by year-end and continued in 2023's first quarter with two, additional 0.25% rate increases at the Fed's January and March meetings, respectively.

Of course, the target in the Fed's gunsight was and remains domestic price inflation, which jumped last year to levels not seen since the early 1980s. Low unemployment, still robust consumer demand, and surging energy prices combined to push the year over year change in the U.S. consumer price index to 9.1% last June, a level last recorded in November 1981. While inflation has since retreated, current readings remain uncomfortably elevated relative to the Fed's 2% long-term policy objective. Moreover, a remarkably strong labor market has kept the Fed on high alert for fear that a 1970s style wage-price spiral could result in "unanchored" inflation expectations among business and consumers.

Against these powerful interest rate and inflation headwinds, the U.S. economy faltered, recording marginally negative growth in 2022's first half. Following a much welcomed late summer drop in energy prices, economic activity improved, but geopolitical uncertainties associated with the Russia-Ukraine conflict and an undeterred Federal Reserve kept investors on edge. Stock markets tumbled across the globe with most suffering double-digit losses by year end 2022. Simultaneously, many developed market bond indices recorded their biggest annual losses in history. For example, the Bloomberg Aggregate Bond Index, a bellwether benchmark including investment-grade corporate bonds and U.S. Treasury securities fell 13.01% in 2022, its second consecutive annual decline and more than four times its previous worst annual loss (-2.92% in 1994). As a result of these selloffs, the classic 60/40 stock-bond portfolio was down 16.86% last year, its worst performance since 2008 and a rare example that stock and bond prices are not always inversely correlated. In fact, 2022 was only the third calendar year in U.S. history during which both stocks and bonds generated negative results. Last year reminded many industry veterans of the late 1970s when former Fed Chairman Paul Volker used aggressive rate hikes to combat soaring inflation at the expense of financial market returns.

Investment Results

At the total fund level, the URS Defined Benefit (DB) plan declined 5.20% last year and its funded status (as determined on a fair market value basis) fell from 105.3% on December 31, 2021, to 94.0% at December 31, 2022. Despite these unfavorable

Defined Benefit Investments *(Continued)*

results, the fund's 2022 investment performance ranked in the top 16% of U.S. public pension plans, and its current funded status remains among that same peer group's very best.

The DB plan's public equity portfolio, which comprised 32% of fund assets last year, declined 16.16% in 2022, meaningfully better than the 18.27% loss registered by that portfolio's FTSE Global All Cap benchmark. Bonds and other fixed income securities comprised 15.3% of DB plan assets in 2022 and recorded losses of 13.33%, beating the Fixed Income benchmark's 13.73% decline. The fund's private equity portfolio was marked at 13.0% of total fund assets on December 31, 2022 and contributed a -6.28% return to total fund results last year, 10.26% above its Russell 3000 + 2.5% benchmark which ended 2022 at -16.54%.

Real assets, which include real estate, timber, and agriculture as well as investments in energy, mining, and infrastructure, ended 2022 comprising 20.1% of DB plan asset value and produced a combined return of 14.83% last year. This performance included a 21.19% boost from the fund's dedicated energy investments, which benefitted from strong demand and rising prices. Other diversifying investments include the DB plan's Absolute Return portfolio, which while positive in 2022, slightly underperformed its benchmark but provided an important offset to the larger losses incurred in the fund's public equity portfolio. Absolute Return comprised 17.2% of plan assets on December 31, 2022, and registered a 5.58% gain last year, though a bit under the 6.46% objective that stipulates a 5% premium on top of the return to 90-day T-bills.

Looking Ahead

To the chagrin of many pundits, the most anticipated recession in U.S. history has, at the time of this writing, not yet materialized. Persistent strength in jobs and consumer spending have defied consensus expectations of a pending economic downturn. Monthly inflation readings so far in 2023 are lower, but price pressures are not abating fast enough to comport with the Fed's stated policy goals.

At the beginning of March, market participants priced in at least three additional rate hikes for a projected 5.50% cycle peak in the Fed Funds rate. A week later, the shocking collapse of Silicon Valley Bank (SVB) and emergency interventions on behalf of other depository institutions immediately soured market sentiment and sent interest rates plummeting. On Monday, March 13, the yield on the 2-year U.S. Treasury note fell from 4.58% to 3.98%, its largest one-day drop since 1982. The Fed is now closely monitoring fallout from the SVB and Signature Bank failures, concerned that a growth-constraining credit crunch may emerge as the primary "risk off" consequence.

The optimistic case is that all other depository institutions are stabilized, but damage to investor and consumer psyches

(and related disinflationary impulses) is sufficient to preclude additional rate hikes. Conversely, should stabilization efforts prove ineffective in stemming bank run contagion, this so far isolated banking crisis could become the catalyst for the long-predicted U.S. recession. Recent events, including additional details regarding U.S. Treasury and Federal Reserve policy support, suggest a constructive resolution is the higher probability outcome.


Conclusion

Last year marked an unfortunate interruption in the URS DB fund's 3-year consecutive win streak. However, the silver lining from this dark cloud experience was superior investment performance relative to most institutional investment peers and market benchmarks. In fact, our 2022 investment results represent a successful proof statement for the unique strategy URS staff and the Retirement Board have developed and carefully implemented. That strategy is best summarized as an intentionally "risk aware" or defensive approach to asset allocation, portfolio construction, and manager selection. More specifically, we endeavor to keep pace with peers and market averages during bull markets but materially outperform (i.e., lose less money) during the occasional but inevitable bear markets.

By tracking the performance of peers and market averages on the upside but more aggressively limiting losses on the downside, the overall rate at which DB fund returns compound increases. And while the annual performance derby is always the source of disproportional scrutiny and entertainment, successfully compounding incrementally higher returns over decades is the key ingredient to securing fully funded status for the URS DB plan.

On behalf of URS members and beneficiaries, our "risk aware" strategy, as manifest in defensive asset allocation, portfolio construction, and manager selection decisions, is tantamount to following the path of the tortoise, not the hare. Last year was a good reminder of why we chose the terrapin way as the large losses and capital impairments many investors suffered in 2022 will take years from which to recover. The current environment remains cloudy and somewhat treacherous for investors, but the "triple hull" design of the URS DB fund tanker should continue to well support our slow but steady voyage to the distant shores of retirement security.

Sincerely,



John D. Skjervem
Chief Investment Officer
Utah Retirement Systems

Defined Benefit Investments *(Continued)*



2022 Investment Summary

(dollars in thousands)

	2022 Beginning Fair Value	Purchases	Sales and Redemptions	Increase (Decrease) in Fair Value	2022 Ending Fair Value Balance	Percent of Total Fair Value
Short-term securities	\$ 3,370,779	35,880,523	(38,130,726)	100,313	1,220,889	2.88%
Equities	16,912,685	3,507,497	(3,957,712)	(3,391,785)	13,070,685	30.81
Debt securities	5,456,730	39,275,787	(37,518,975)	(753,917)	6,459,625	15.23
Real assets	6,948,865	1,563,751	(543,399)	644,426	8,613,643	20.30
Private equity	5,973,606	599,763	(380,236)	(663,506)	5,529,627	13.03
Absolute return	6,875,008	4,268,730	(3,579,195)	(33,728)	7,530,815	17.75
Totals	\$ 45,537,673	85,096,051	(84,110,243)	(4,098,197)	42,425,284	100.00%

Outline of Investment Policies

The governing body of the Utah Retirement Systems (Systems) is the seven member Utah State Retirement Board (Board). The Board is composed of the Utah State Treasurer, who serves as an ex-officio member, and six trustees who are appointed by the Governor. Four board members are appointed for their investment expertise, and two members are appointed to represent employee and employer interests.

The Board has statutory authority to pool pension assets in the Utah State Retirement Investment Fund (Fund). Statutes also establish that this Fund will be invested in accordance with the “prudent investor rule.” The prudent investor rule requires all members of the Board and investment staff to discharge their duties solely in the interest of Systems’ participants and beneficiaries and with the care, skill, prudence, and diligence that they

would exercise in the conduct of their own affairs. To this end, a Statement of Investment Policy and Performance Objectives has been created for the Fund and adopted by the Board. The purpose of this Statement is to:

- » Outline the expected return and risk profile for the Fund;
- » Establish the target asset allocation mix and acceptable rebalancing ranges;
- » Describe plan and manager policies and objectives for performance evaluation.

The primary investment objectives are to preserve Fund assets and generate an appropriate level of risk-adjusted return to meet future pension obligations.

The Systems periodically complete an asset allocation and liability study to determine the optimal portfolio diversification to meet those obligations.

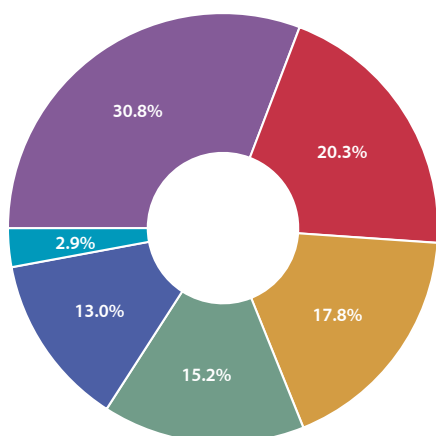
Defined Benefit Investments *(Continued)*

The Systems' investment portfolio includes strategic, long-term commitments in the following asset classes: Equities, Debt Securities, Real Assets, Private Equity, and Absolute Return. Asset allocation is reviewed in conjunction with the plan liabilities at least every five years.

The Board's policy is to establish a long-term strategic asset allocation that manages overall expected portfolio risk (volatility) and maximizes expected return without unduly constraining the discretionary, tactical decision-making process of the investment managers.

Defined Benefit Systems Investments at Fair Value

December 31, 2022



To implement the asset allocation plan, the Executive Director, supported by the Board, staff, and consultant, selects appropriate money management experts to invest the Fund assets. This selection process includes the creation of specific search criteria, completion and documentation of analysis, and due diligence on potential candidates. It is not the staff or Board's intention to be involved with the day-to-day decisions made by external investment managers. Internal investment staff also manages segments of the portfolio.

All managers are expected to communicate with the staff at least quarterly.

Managers' portfolios are evaluated both against appropriate market indices and similar manager style groups. The investment policy outlines appropriate benchmarks.

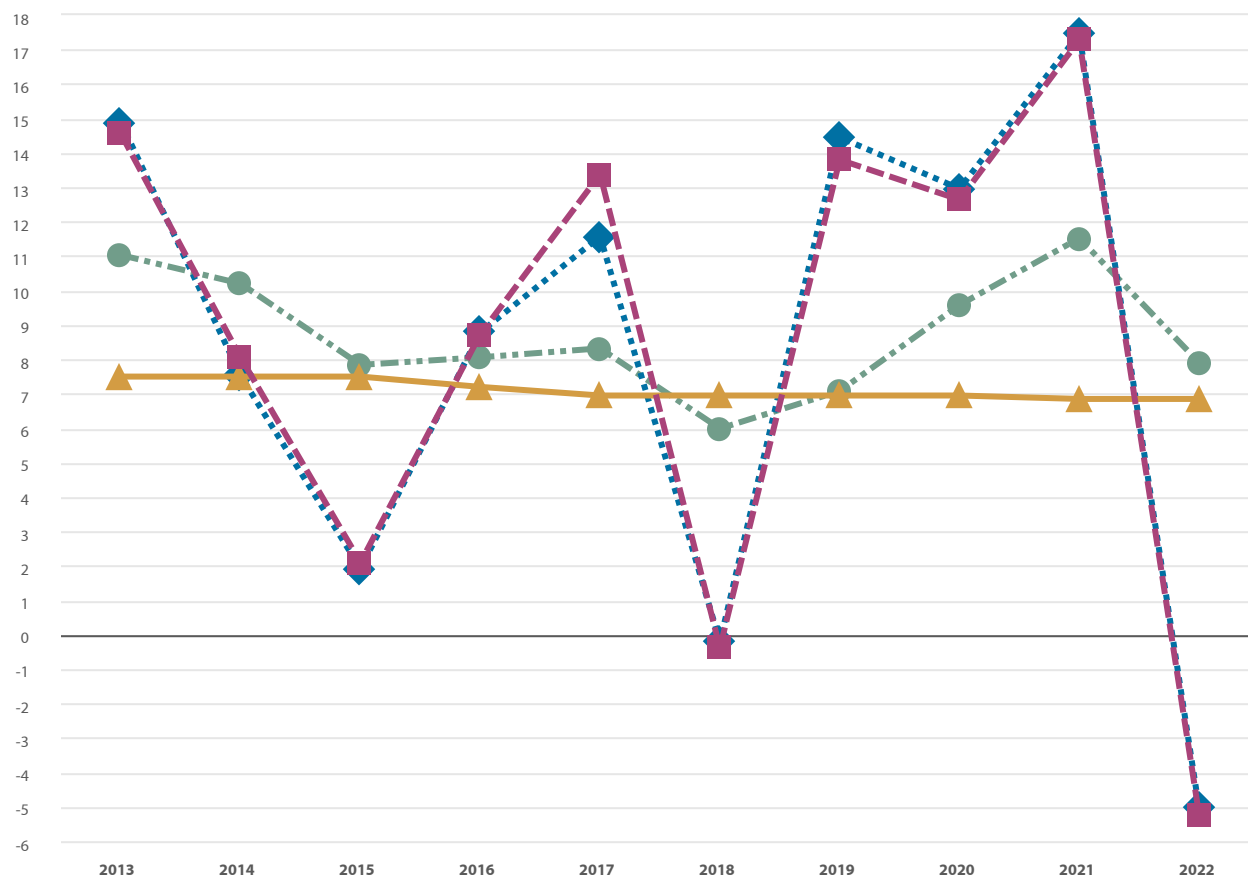
Investment return calculations are prepared using a time-weighted rate of return.

The allocation of assets as reported to the board are as follows: Equity securities 30.8%, Debt securities 15.2%, Absolute return 17.8%, Private equity 13.0% and Real assets 20.3%. These allocation percentages differ from investment asset percentages presented in the MD&A and Statement of Fiduciary Net Position as a result of different methodologies used to categorize investment assets and the impact of derivatives for investment purposes versus financial statement presentation purposes. For investment purposes the impact of derivatives used to rebalance the defined portfolio are expressed using the notional value of those derivatives.

December 31,	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Equities securities	37.6%	35.5	33.9	35.2	37.8	35.1	37.7	39.9	37.1	30.8
Debt securities	15.9	15.6	15.8	15.0	14.2	16.9	17.3	13.5	12.0	15.2
Private equity	11.0	11.8	11.9	11.3	10.7	11.7	11.3	11.5	13.1	13.0
Real assets	12.2	14.0	14.9	14.7	14.8	16.6	13.9	13.3	15.3	20.3
Short-term securities	6.6	5.8	8.2	8.2	8.6	5.1	5.2	6.7	7.4	2.9
Absolute return	16.7	17.2	15.3	15.5	13.9	14.7	14.6	15.1	15.1	17.8
Total portfolio	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Defined Benefit Investments *(Continued)*

10-Year Total Pension Investment Rates of Return

(in percents)*(dollars in millions)*

	Total Investment Portfolio Fair Value	(1) Smooth Expected Rate of Return	(2) Fair Value Rate of Return	(3) Actuarial Assumed Interest Rate	(4) Money Weighted Rate of Return
2013	\$ 25,765	11.03%	14.89%	7.50%	14.55%
2014	26,955	10.20	7.52	7.50	7.94
2015	27,086	7.84	1.92	7.50	2.02
2016	29,017	8.06	8.79	7.20	8.73
2017	32,125	8.32	13.57	6.95	13.38
2018	31,376	5.99	(0.22)	6.95	(0.38)
2019	35,612	7.08	14.45	6.95	13.80
2020	39,308	9.58	12.96	6.95	12.64
2021	45,538	11.52	17.46	6.85	17.28
2022	42,425	7.91	(5.04)	6.85	(5.23)

Smoothed Expected Rate of Return consists of investment income in excess or shortfall of the expected 6.85% on fair value smoothed over a 5-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.

- (1) **Fair Value Rate of Return** consists of cash income plus gains and losses due to changes in fair value, whether realized or unrealized (before deduction of investment fees). (For 2022, (5.20)% net of fees.)
- (2) **Actuarial Assumed Interest Rate** is the assumed rate of return on the fair value of assets, and is used in establishing retirement contribution rates and in determining current benefit reserve requirements.
- (3) **Money Weighted Rate or Return** is calculated as the internal rate of return on pension plan investments, net of investment expenses.

Defined Benefit Investments *(Continued)*Comparative Investment Results ⁽¹⁾⁽²⁾⁽³⁾

Year Ended December 31, 2022

Investment Option Comparative Index	1 Year	3 Year	5 Year	10 Year
Global Equity*	(16.16)%	4.63%	5.13%	8.37%
FTSE Global All Cap Index	(18.27)	3.89	4.97	7.92
Global Debt Securities*	(13.33)	(1.64)	0.74	1.76
Fund Benchmark	(13.73)	(2.32)	0.30	1.41
<i>Benchmark consisting of:</i>				
60% Bloomberg U.S. Aggregate Bond Index				
15% Bloomberg Global Aggregate Bond Index Hedged				
25% Bloomberg World Government Inflation-Linked Bond Index Hedged				
Real Assets**	14.83	11.99	10.01	10.33
U.S. Consumer Price Index + 5%	11.27	10.14	8.89	7.57
Private Equity	(6.28)	26.21	23.31	19.57
Private Equity Benchmark				
Russell 3000 + 2.5%	(16.54)	9.91	11.55	14.78
Absolute Return	5.58	7.21	5.83	5.53
3-month Treasury Bills + 5.0%	6.46	5.72	6.26	5.76
Short Term	6.34	2.58	3.10	1.67
3 Month Treasury Bills	1.46	0.72	1.26	0.76
Total Fund***	(5.04)	7.99	7.56	8.37
Fund Benchmark	(9.05)	5.28	6.07	7.22
<i>Benchmark consisting of:</i>				
35% FTSE Global All Cap Index				
15% 3-month Treasury Bill + 5%				
18% CPI-W + 5%				
12% Bloomberg U.S. Aggregate Bond Index				
12% Russell 3000 Index + 2.5%				
5% Bloomberg World Government Inflation-Linked Bond Index Hedged				
3% Bloomberg Global Aggregate Bond Index Hedged				
CAI Public Fund — Very Large Database Median	(9.96)	5.58	6.18	7.57
Inflation	6.25	5.14	3.89	2.57

(1) Investment measurement services provided by Callan Associates Inc.

(2) Total rates of return include cash income plus gains and losses due to changes in fair value, where realized or unrealized.

(3) Investment return calculations were prepared using a time-weighted return except private equity which is prepared using a dollar weighted return.

*Global equity and fixed income returns are reported at gross for comparability to the benchmarks which are reported as gross of fees. All other returns are reported a net of fees.

**The non real estate portion of Real Assets only reflects returns for years 1, 3 and 5. Year 10 is for real estate only using a NCREIF Total Index Benchmark.

***Total fund return is blended based upon gross returns for global equity and fixed income and net returns for Real Assets, Absolute Return, Short Term and Private Equity. Total fund net return is (5.20)%, 7.83%, 7.39% and 8.19% for 1, 3, 5 and 10 year periods.

Defined Benefit Investments *(Continued)*

List of Largest Assets Held

December 31, 2022

Largest Equity Holdings*

Description	<i>(By Fair Value)</i>	
	Shares	Fair Value
Microsoft Corp.	1,021,410	\$ 244,954,546
Apple Inc.	1,862,076	241,939,535
Alphabet Inc.	1,844,160	163,040,687
Amazon Inc.	1,178,980	99,034,320
United Healthcare Group	174,319	92,420,447
Johnson & Johnson Company	326,092	57,604,152
Exxon Mobile Corp	510,572	56,316,092
S&P Global Inc	167,448	56,085,033
Visa Inc.	262,950	54,630,492
Embraer	19,689,150	53,364,598

Largest Debt Securities Holdings

Description	<i>(By Fair Value)</i>	
	Par Value	Fair Value
United States Treasury Note 4.375% 10/31/2024	\$ 120,167,000	\$ 119,880,665
United States Treasury Note 3.875% 11/30/2027	111,371,000	110,944,659
United States Treasury Note 3.625% 12/31/2029	101,860,000	101,589,434
United States Treasury Note 2.375% 02/15/2042	74,205,000	57,062,486
United States Treasury Note 3.125% 08/15/2025	56,693,000	55,085,222
Germany Federal Republic 0.4% 09/13/2024	51,800,000	53,254,206
FNMA Pool 2.0% 02/01/2052	63,247,529	51,639,846
FNMA Single Family Mortgage 0% 1/2023	56,882,100	51,167,485
United States Treasury Inflation Linked Bond 0.625% 01/15/2024	40,873,000	51,110,253
United States Treasury Note 1.5% 02/15/2025	51,045,000	48,080,003

*As required by SEC Rule 13F, a list of publicly traded equity securities held by Utah Retirement Systems is available online through the SEC Electronic Data Gathering, Analysis, and Retrieval (EDGAR) website. This list is also available upon request.

Schedules of Fees and Commissions

Year Ended December 31, 2022

Broker Commission Fees

Broker	Commissions
Morgan Stanley	\$ 391,838
Instinet	242,931
Goldman Sachs	271,019
Cowen	112,025
Jefferies	93,258
Gordan Haskett Capital	86,006
ISI Group	82,932
Direct Trading Institutional	64,627
Sanford C. Bernstein	54,205
Merrill Lynch	49,924
Other	1,187,349
Total	\$ 2,636,114

Schedule of Investment Fees and Commissions

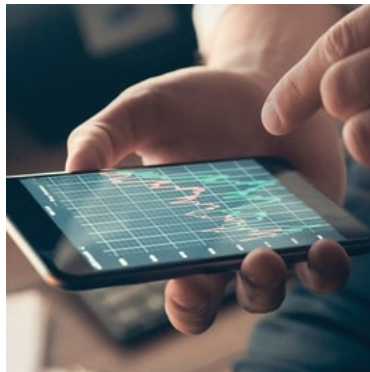
Investment advisor fees:*	
Absolute return	\$ 15,817,576
Equity securities	31,694,341
Debt securities	7,669,882
Private equity	13,988,253
Real assets	44,204,888
Short term	549,056
Total investment advisor fees	113,923,996
Investment brokerage fees	2,636,114
Total fees and commissions	\$ 116,560,110

*Represents fees that are invoiced and paid directly by URS. These numbers do not represent all management, performance, carried interest, or other fees charged directly by investment advisors. These and other investment related fees are netted from returns.

Utah Retirement Systems uses a commission recapture program as part of its trading strategies. During the year ending December 31, 2022, Utah Retirement Systems recaptured approximately \$97,742 from the gross commission charges. This recaptured sum was used to cover or offset the \$160,850 in investment expenses that otherwise would have been paid for with investment funds.

Defined Benefit Investments *(Concluded)*

Defined Contribution Savings Plan Investments



Utah Retirement Investment Consultants

Albourne America LLC
655 Montgomery Street
San Francisco, CA 94111

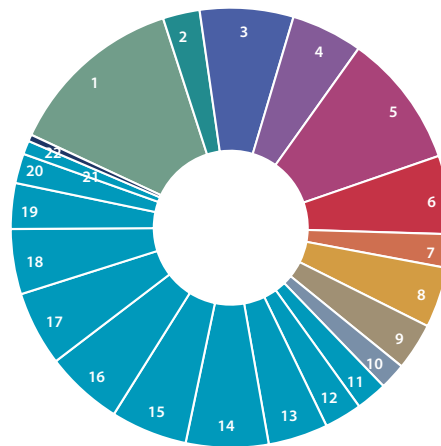
Callan Associates, Inc.
101 California Street
Suite 3500
San Francisco, 94111

Glass Lewis & Company
One Sansome Street
Suite 3300
San Francisco, 94104

Northern Trust Company
50 South LaSalle Street
Chicago, IL 60675

Savings Plans Investments by Percentage

December 31, 2022



- 1- Income Fund 13.16%
- 2- Bond Fund 2.72%
- 3- Balanced Fund 6.90%
- 4- Large Cap Stock Value Fund 5.29%
- 5- Large Cap Stock Index Fund 9.90%
- 6- Large Cap Stock Growth Fund 5.78%
- 7- International Fund 2.49%
- 8- Small Cap Stock Fund 4.46%
- 9- Brokerage Window 3.49%
- 10- Tier 2 Nonvested Fund 1.94%
- 11- Target Retired Fund 2.31%
- 12- Target Date 2015 Fund 2.76%
- 13- Target Date 2020 Fund 4.43%
- 14- Target Date 2025 Fund 6.08%
- 15- Target Date 2030 Fund 5.65%
- 16- Target Date 2035 Fund 5.74%
- 17- Target Date 2040 Fund 5.53%
- 18- Target Date 2045 Fund 4.81%
- 19- Target Date 2050 Fund 3.37%
- 20- Target Date 2055 Fund 2.20%
- 21- Target Date 2060 Fund 0.86%
- 22- Target Date 2065 Fund 0.12%

Defined Contribution Savings Plans Investments



Investment Highlights

Utah Retirement Systems' 401(k), 457(b), Roth and Traditional IRAs are tax-advantaged retirement savings plans authorized under sections 401(k), 457(b), and 408 of the Internal Revenue Code. These plans are available to employees of the state, local government, and public education employers throughout Utah.

The participants of the plans have a choice of 20 core investment funds and a brokerage window in which their monies may be invested. Each participant may choose one or a combination of the core funds. The Savings Plans Investments table shows the total assets in the various investment options. The graph and table on page [186](#) show the asset distribution as of December 31, 2022.

Investment and Administrative Expenses

There are no front-end load, redemption, or other hidden fees associated with these plans. All costs reflected in the table on page [188](#) are deducted from earnings prior to posting to participant accounts and do not appear as separate items on participant statements.

The administrative fee for the brokerage window account was a flat rate of \$12 per quarter. Investment fees and broker commissions are paid by the participant according to the trading and securities selected within the brokerage window.

Savings Plans Investments

December 31, 2022

Investment Options	<i>(in thousands)</i>	
		Total
Income Fund	\$	1,011,873
Bond Fund		208,809
Balanced Fund		530,339
Large Cap Stock Value Fund		406,281
Large Cap Stock Index Fund		760,846
Large Cap Stock Growth Fund		444,688
International Fund		191,531
Small Cap Stock Fund		342,895
Brokerage Window		268,393
Tier 2 Nonvested Fund		149,355
Target Retired Fund		177,722
Target Date 2015 Fund		211,906
Target Date 2020 Fund		340,799
Target Date 2025 Fund		467,595
Target Date 2030 Fund		434,156
Target Date 2035 Fund		441,108
Target Date 2040 Fund		425,381
Target Date 2045 Fund		369,719
Target Date 2050 Fund		259,319
Target Date 2055 Fund		169,380
Target Date 2060 Fund		66,235
Target Date 2065 Fund		9,074
Total	\$	7,687,404

Defined Contribution Savings Plans Investments *(Continued)*

By administering the savings plans internally rather than through a third party, expenses are kept at very low levels to maximize earnings to each participant. The table above shows these expenses to be nominal when compared to much higher fees on most annuities, mutual funds, and insurance contracts.

An annual account maintenance fee of \$15 is assessed to inactive accounts with combined 401(k), 457(b), Roth and Traditional IRA balances of less than \$5,000. (Inactive accounts are defined as accounts that have had no contribution or withdrawal activity for a period of at least 12 months and the participant is no longer employed with a URS participating employer.)

There is a \$60 one-time service fee for loans, and a 2% fee for short-term trading (more frequently than 30 days on amounts traded).

The investments described are not FDIC insured; not deposits or obligations of, or guaranteed by, any financial institution; and not guaranteed by the Utah Retirement Systems or any government agency.

The past performance of any of these funds does not guarantee future results.

2022 Investment Summary and Investment and Administrative Fees

(dollars in thousands)

Fund	2022 Beginning Fair Value	Purchases	Sales and Redemptions	Increase (Decrease) in Fair Value	2022 Ending Fair Value	Percent of Total Fair Value	Invest- ment Fees	Admin- istrative Fees	Total Fees
Income Fund	\$ 923,869	180,199	97,365	5,170	1,011,873	13.16%	0.21%	0.12%	0.33%
Bond Fund	259,489	16,975	35,275	(32,380)	208,809	2.72	0.10	0.12	0.22
Balanced Fund	714,026	17,054	27,422	(173,319)	530,339	6.90	0.24	0.12	0.36
Large Cap Stock Value Fund	434,064	53,236	27,383	(53,636)	406,281	5.29	0.41	0.12	0.53
Large Cap Stock Index Fund	990,902	23,305	56,680	(196,681)	760,846	9.90	0.02	0.12	0.14
Large Cap Stock Growth Fund	771,070	31,671	34,899	(323,154)	444,688	5.78	0.24	0.12	0.36
International Fund	234,011	9,314	10,179	(41,615)	191,531	2.49	0.05	0.12	0.17
Small Cap Stock Index Fund	411,929	18,546	17,652	(69,928)	342,895	4.46	0.27	0.12	0.39
Brokerage Window	325,938	34,563	21,121	(70,987)	268,393	3.49	N/A	N/A	N/A
Tier 2 Nonvested	164,336	25,721	15,721	(24,981)	149,355	1.94	0.14	0.12	0.26
Target Date Retired Fund	214,486	18,860	31,710	(23,914)	177,722	2.31	0.13	0.12	0.25
Target Date 2015 Fund	247,816	14,144	17,182	(32,872)	211,906	2.76	0.13	0.12	0.25
Target Date 2020 Fund	411,256	21,400	39,154	(52,703)	340,799	4.43	0.14	0.12	0.26
Target Date 2025 Fund	531,152	43,509	31,778	(75,288)	467,595	6.08	0.15	0.12	0.27
Target Date 2030 Fund	475,187	40,187	12,583	(68,635)	434,156	5.65	0.15	0.12	0.27
Target Date 2035 Fund	474,152	48,688	9,042	(72,688)	441,108	5.74	0.14	0.12	0.26
Target Date 2040 Fund	465,589	37,975	5,881	(72,302)	425,381	5.53	0.12	0.12	0.24
Target Date 2045 Fund	402,134	38,049	6,560	(63,904)	369,719	4.81	0.11	0.12	0.23
Target Date 2050 Fund	275,930	33,534	5,103	(45,042)	259,319	3.37	0.10	0.12	0.22
Target Date 2055 Fund	168,141	30,876	1,642	(27,995)	169,380	2.20	0.10	0.12	0.22
Target Date 2060 Fund	57,365	20,392	1,727	(9,795)	66,235	0.86	0.10	0.12	0.22
Target Date 2065 Fund	5,322	5,405	554	(1,099)	9,074	0.12	0.10	0.12	0.22
Total	\$ 8,958,164	763,603	506,613	(1,527,748)	7,687,404	100.0%			

Defined Contribution Savings Plans Investments (Continued)

Defined Contribution Plans Comparative Annualized Rates of Return

Year Ended December 31, 2022

Investment Option / Comparative Index	Annualized			
	1-Year	3-Year	5-Year	10-Year
Income Fund	1.85%	1.86%	2.07%	1.87%
90-day Treasury Bills Index	1.46	0.72	1.26	0.76
Bond Fund	(10.83)	(0.81)	1.34	2.31
*Bloomberg US Aggregate Index	(13.01)	(2.71)	0.02	1.06
Balanced Fund	(19.06)	4.53	6.17	8.92
Balanced index ⁽¹⁾	(16.41)	3.67	5.80	7.97
Large Cap Stock Value Fund	(7.28)	9.34	8.65	12.37
*Russell 1000 Value Index	(7.54)	5.96	6.67	10.29
Large Cap Stock Index Fund	(19.20)	7.22	8.96	12.16
Large Cap Stock Blended Index ⁽²⁾	(19.13)	7.35	9.13	12.37
Large Cap Stock Growth Fund	(38.93)	3.39	7.69	12.46
*Russell 1000 Growth Index	(29.14)	7.79	10.96	14.10
International Fund	(16.23)	0.33	0.97	4.03
International Blended Index ⁽³⁾	(16.58)	0.20	0.85	3.98
Small Cap Stock Fund	(13.67)	7.71	5.67	9.96
*Russell 2000 Index	(20.44)	3.10	4.13	9.01
Target Retired Fund	(9.73)	1.69	2.84	N/A
Target Date Retirement Index ⁽⁴⁾	(10.41)	0.66	2.21	—
Target Date 2015 Fund	(9.97)	2.10	3.31	N/A
Target Date 2015 Index ⁽⁵⁾	(10.63)	1.33	2.84	—
Target Date 2020 Fund	(10.56)	2.54	3.77	N/A
Target Date 2020 Index ⁽⁶⁾	(10.88)	2.05	3.45	—
Target Date 2025 Fund	(11.07)	3.38	4.39	N/A
Target Date 2025 Index ⁽⁷⁾	(11.37)	2.89	4.14	—
Target Date 2030 Fund	(12.74)	4.28	5.10	N/A
Target Date 2030 Index ⁽⁸⁾	(12.98)	3.16	4.43	—
Target Date 2035 Fund	(13.93)	4.14	4.96	N/A
Target Date 2035 Index ⁽⁹⁾	(13.91)	3.46	4.64	—
Target Date 2040 Fund	(14.77)	4.88	5.49	N/A
Target Date 2040 Index ⁽¹⁰⁾	(14.97)	3.62	4.79	—
Target Date 2045 Fund	(15.50)	5.11	5.63	N/A
Target Date 2045 Index ⁽¹¹⁾	(15.86)	3.72	4.89	—
Target Date 2050 Fund	(15.67)	5.16	5.66	N/A
Target Date 2050 Index ⁽¹²⁾	(15.98)	3.72	4.89	—
Target Date 2055 Fund	(15.67)	5.16	5.66	N/A
Target Date 2055 Index ⁽¹³⁾	(15.98)	3.72	4.89	—
Target Date 2060 Fund	(15.67)	5.16	5.66	N/A
Target Date 2060 Index ⁽¹⁴⁾	(15.98)	3.72	4.89	—
Target Date 2065 Fund	(15.67)	N/A	N/A	N/A
Target Date 2065 Index ⁽¹⁵⁾	(15.98)	N/A	—	—
Tier 2 Nonvested Fund	(13.28)	4.20	4.69	6.01
Tier 2 Nonvested Index ⁽¹⁶⁾	(13.19)	2.95	4.13	5.48

Past performance does not guarantee future results.

Continued on page 190.

Defined Contribution Savings Plans Investments *(Continued)*

Defined Contribution Plans Comparative Annualized Rates of Return *(Concluded)*

Year Ended December 31, 2022

All fund returns are reported net of investment and administrative fees. All returns for periods greater than one year are annualized. Investment return calculations were prepared using a time-weighted return. Comparative indexes below reflect current asset allocation targets.

- | | |
|---|---|
| <p>(1) Balanced Index: 60% S&P 500, 40% Bloomberg US Aggregate Bond through 12/31/2014, 60% Russell 1000*, 40% Bloomberg US Aggregate Bond thereafter</p> <p>(2) Large Cap Stock Blended Index: S&P 500 through 6/30/2011, Russell 1000 Index* thereafter</p> <p>(3) International Blended Index: MSCI EAFE through 3/31/2011, MSCI ACWI ex US IMI thereafter</p> <p>(4) Target Date Retired Index: 11% 90 Day T-Bills, 31% Bloomberg US Aggregate Bond, 20% Russell 1000 Index*, 6% MSCI ACWI ex. US IMI, 1% Russell 2000 Index*, 16% Bloomberg Global Aggregate ex. US Bond Index (hedged), 11% Bloomberg Global Inflation-Linked Bond Index 1-10 Year (USD Hedged), 4% NFI-ODCE (Value Weighted)</p> <p>(5) Target Date 2015 Index: 11% 90 Day T-Bills, 30% Bloomberg US Aggregate Bond, 23% Russell 1000 Index*, 6% MSCI ACWI ex. US IMI, 1% Russell 2000 Index*, 14% Bloomberg Global Aggregate ex. US Bond Index (hedged), 11% Bloomberg Global Inflation-Linked Bond Index 1-10 Year (USD Hedged), 4% NFI-ODCE (Value Weighted)</p> <p>(6) Target Date 2020 Index: 9% 90 Day T-Bills, 26% Bloomberg US Aggregate Bond, 25% Russell 1000 Index*, 9% MSCI ACWI ex. US IMI, 2% Russell 2000 Index*, 13% Bloomberg Global Aggregate ex. US Bond Index (hedged), 9% Bloomberg Global Inflation-Linked Bond Index 1-10 Year (USD Hedged), 7% NFI-ODCE (Value Weighted)</p> <p>(7) Target Date 2025 Index: 8% 90 Day T-Bills, 21% Bloomberg US Aggregate Bond, 28% Russell 1000 Index*, 13% MSCI ACWI ex. US IMI, 3% Russell 2000 Index*, 12% Bloomberg Global Aggregate ex. US Bond Index (hedged), 6% Bloomberg Global Inflation-Linked Bond Index 1-10 Year (USD Hedged), 9% NFI-ODCE (Value Weighted)</p> <p>(8) Target Date 2030 Index: 2% 90 Day T-Bills, 18% Bloomberg US Aggregate Bond, 32% Russell 100 Index*, 19% MSCI ACWI ex. US IMI, 5% Russell 2000 Index*, 11% Bloomberg Global Aggregate ex. US Bond Index (hedged), 3% Bloomberg Global Inflation-Linked Bond Index 1-10 Year (USD Hedged), 10% NFI-ODCE (Value Weighted)</p> <p>(9) Target Date 2035 Index: 14% Bloomberg US Aggregate Bond, 34% Russell 1000 Index*, 25% MSCI ACWI ex. US IMI, 7% Russell 2000 Index, 9% Bloomberg Global Aggregate ex. US Bond Index (hedged), 1% Bloomberg Global Inflation-Linked Bond Index 1-10 Year (USD Hedged), 10% NFI-ODCE (Value Weighted)</p> <p>(10) Target Date 2040 Index: 9% Bloomberg US Aggregate Bond, 37% Russell 1000 Index*, 31% MSCI ACWI ex. US IMI, 9% Russell 2000 Index*, 6% Bloomberg Global Aggregate ex. US Bond Index (hedged), 8% NFI-ODCE (Value Weighted)</p> | <p>(11) Target Date 2045 Index: 6% Bloomberg US Aggregate Bond, 41% Russell 1000 Index*, 34% MSCI ACWI ex. US IMI, 10% Russell 2000 Index*, 3% Bloomberg Global Aggregate ex. US Bond Index (hedged), 6% NFI-ODCE (Value Weighted)</p> <p>(12) Target Date 2050 Index: 4% Bloomberg US Aggregate Bond, 42% Russell 1000 Index*, 35% MSCI ACWI ex. US IMI, 11% Russell 2000 Index*, 2% Bloomberg Global Aggregate ex. US Bond Index (hedged), 6% NFI-ODCE (Value Weighted)</p> <p>(13) Target Date 2055 Index: 4% Bloomberg US Aggregate Bond, 42% Russell 1000 Index*, 35% MSCI ACWI ex. US IMI, 11% Russell 2000 Index*, 2% Bloomberg Global Aggregate ex. US Bond Index (hedged), 6% NFI-ODCE (Value Weighted)</p> <p>(14) Target Date 2060 Index: 4% Bloomberg US Aggregate Bond, 42% Russell 1000 Index*, 35% MSCI ACWI ex. US IMI, 11% Russell 2000 Index*, 2% Bloomberg Global Aggregate ex. US Bond Index (hedged), 6% NFI-ODCE (Value Weighted)</p> <p>(15) Target Date 2065 Index: 4% Bloomberg US Aggregate Bond, 42% Russell 1000 Index*, 35% MSCI ACWI ex. US IMI, 11% Russell 2000 Index*, 2% Bloomberg Global Aggregate ex. US Bond Index (hedged), 6% NFI-ODCE (Value Weighted)</p> <p>(16) Tier 2 Nonvested Index: 17% Bloomberg US Aggregate Bond, 34% Russell 1000 Index*, 21% MSCI ACWI ex. US IMI, 6% Russell 2000 Index*, 10% Bloomberg Global Aggregate ex. US Bond Index (hedged), 2% Bloomberg Global Inflation-Linked Bond Index 1-10 Year (USD Hedged), 10% NFI-ODCE (Value Weighted)</p> |
|---|---|

*Russell Investment Group is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Russell is a trademark of Russell Investment Group.

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Defined Contribution Savings Plans Investments *(Continued)*

List of Largest Assets Held

December 31, 2022

Largest Equity Holdings*

Description	<i>(By Fair Value)</i>	
	Shares	Fair Value
Apple Inc.	1,052,030	\$ 136,690,258
Microsoft Corp.	559,502	134,179,770
Alphabet Inc.	1,014,540	89,776,024
Amazon Inc.	823,920	69,209,280
Nvidia	328,527	48,010,936
Visa Inc.	192,839	40,064,231
Eli Lilly & Company	108,409	39,660,349
United Healthcare Group	71,785	38,058,971
Mastercard Inc.	97,506	33,905,761
Tesla	274,990	33,873,268

Largest Debt Securities Holdings

Description	<i>(By Fair Value)</i>	
	Par Value	Fair Value
United States Treasury Note 3.0% 06-30-2024	\$ 141,125,000	\$ 139,912,207
FNMA Pool 2% 01-01-2051	40,359,006	33,286,198
United States Treasury Note 4.5% 11-30-2024	29,455,000	29,590,911
FHLMC Super 30Y Fixed Pool 3.5% 05-01-2052	29,457,872	26,947,439
FNMA Pool 3.5% 05-01-2052	27,100,936	24,852,705
FHLMC Pool 3.5% 04-01-2052	27,005,925	24,671,163
FHLMC Pool 2.5% 09-01-2052	26,123,016	22,191,245
FNMA Pool 3.5% 04-01-2052	22,506,229	20,669,772
United States Treasury Note.75% 04/30/26	22,059,000	19,770,683
United States Treasury Note 4.5% 11-15-2025	18,805,000	19,041,816

*As required by SEC Rule 13F, a list of publicly traded equity securities held by Utah Retirement Systems is available online through the SEC Electronic Data Gathering, Analysis, and Retrieval (EDGAR) website. This list is also available upon request.

Schedules of Fees and Commissions

Year Ended December 31, 2022

Broker Commission Fees

Broker	Commission
Frank Russell	\$ 14,830
Instinet	11,822
Bear Stearns	9,876
Morgan Stanley	6,791
Allen & Company	5,418
ISI Group	3,944
Sanford C Bernstein	3,692
Jefferies	2,852
William Blare & Company	2,097
Dowling & Partners	1,327
All Others	20,882
Total	\$ 83,531

Schedule of Investment Fees and Commissions

Investment advisor fees:*	
Debt securities	\$ 1,168,839
Equity securities	2,186,003
Real assets	129,846
Total investment advisor fees	3,484,688
Investment brokerage fees	83,531
Total fees and commissions	\$ 3,568,219

*Represents fees that are invoiced and paid directly by URS. These numbers do not represent all management, wrap, or other fees charged directly by investment advisors. These and other fees are netted from returns.

Utah Retirement Systems uses a commission recapture program as part of its trading strategies. During the year ending December 31, 2022, Utah Retirement Systems recaptured \$10,061 from the gross commission charges. This recaptured sum was used to cover or offset the \$19,964 in investment expenses that otherwise would have been paid for with investment funds.

Defined Contribution Savings Plans Investments *(Concluded)*



Investment Professionals

Defined Contribution Plans Investment Professionals

BlackRock Asset Management
50 Hudson Yards
New York, NY 10001

Charles Schwab
101 Montgomery Street
San Francisco, CA 94104

Dimensional Fund Advisors, Inc.
6300 Bee Cave Road
Austin, TX 78746

Dodge & Cox Investment
Managers
555 California Street
40th Floor
San Francisco, CA 94104

Jennison Associates, LLC
466 Lexington Avenue
New York, NY 10017

Insight Investment
201 Washington Street
Suite 2900
Boston, MA 02108

Northern Trust Company
50 South LaSalle Street
Chicago, IL 60675

The Prudential Insurance Company
of America
751 Broad Street
Newark, NJ 07102

T. Rowe Price
100 East Pratt Street, Suite 4
Baltimore, MD 21202

Utah Retirement Systems
560 East 200 South
Salt Lake City, UT 84102

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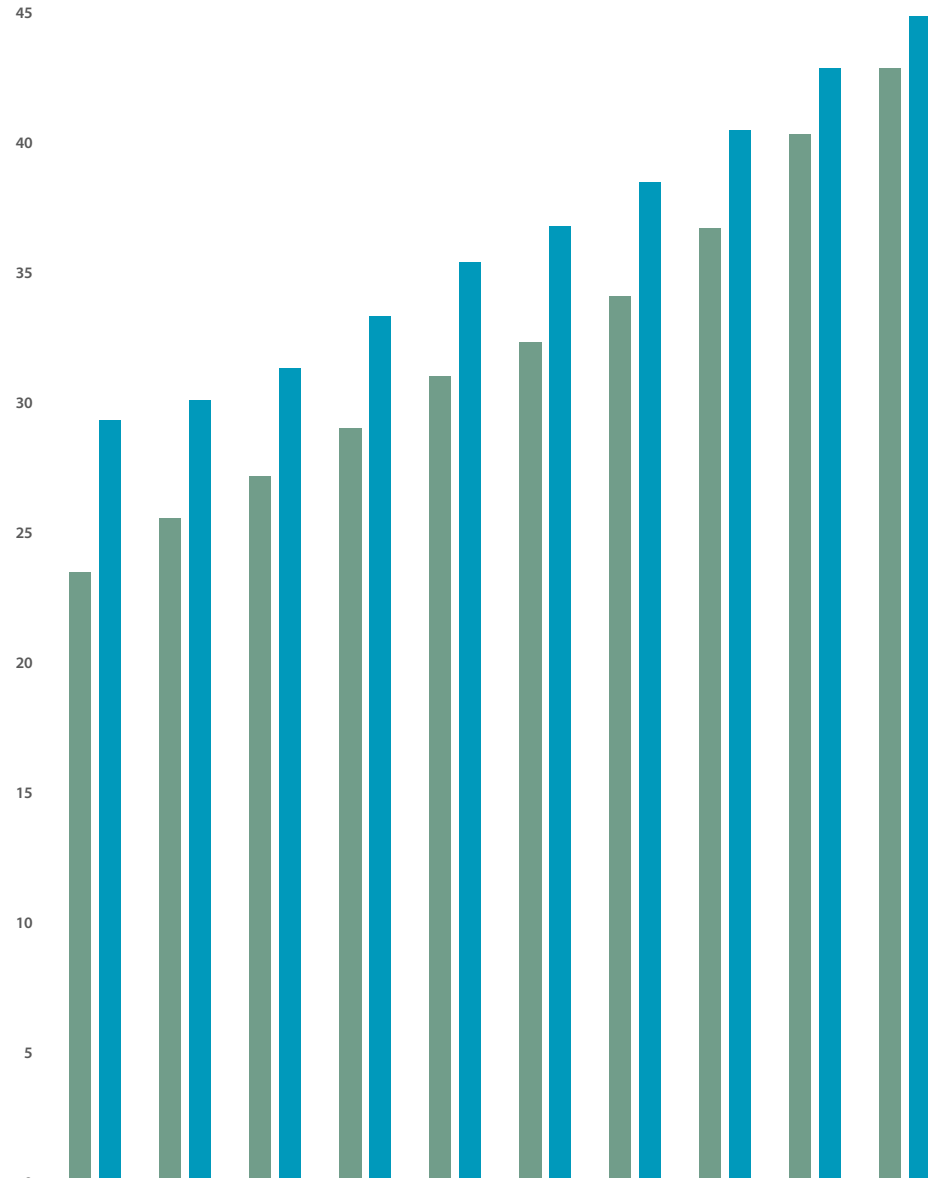
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Utah Retirement Systems

Funding Progress with Funding Ratios

(dollars in billions)



(dollars in billions)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Actuarial value of assets	\$ 23.4	25.5	27.1	28.9	30.9	32.2	34.0	36.6	40.2	42.8
Accrued actuarial liability	29.2	30.0	31.2	33.2	35.3	36.7	38.4	40.4	42.8	44.8
Funding Ratios	80%	85%	87%	87%	88%	88%	89%	91%	94%	96%

Utah Retirement Systems

Actuary's Certification Letter



P: 469.524.0000 | www.grsconsulting.com

August 11, 2022

Utah State Retirement Board
540 East 200 South
Salt Lake City, UT 84102

Dear Members of the Board:

Subject: Actuarial Valuation as of January 1, 2022

This report describes the current actuarial condition of the Utah Retirement Systems (URS), determines the calculated employer contribution rates, and analyzes changes in these contribution rates. In addition, the report provides various summaries of the data. A separate report is issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67 and 68. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of January 1, the first day of the URS plan year. This report was prepared at the request of the Board and is intended for use by the URS staff and those designated or approved by the Board. This report may be provided to parties other than URS staff only in its entirety and only with the permission of the Board.

Under URS statutes, the Board of Trustees must certify employer contribution rates annually. These rates are determined actuarially, based on the Board's funding policy, although, as discussed below, the Board may choose to maintain the current rate if it is greater than the actuarially calculated rate. Contribution rates determined

by a given actuarial valuation become effective eighteen months after the valuation date. In other words, the rates determined by this January 1, 2022 actuarial valuation will be used by the Board when certifying the employer contribution rates for the 12-month period beginning July 1, 2023 and ending June 30, 2024. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board certified contribution rates will be updated to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

Financing objectives and funding policy

In setting contribution rates, the Board's principal objectives are:

- » To set rates so that the unfunded actuarial accrued liability (UAAL) will be amortized over a reasonable period from the current valuation date.
- » To set rates so that they remain relatively level over time.
- » Decrease the contribution rates in a gradual and orderly manner as the funded ratio of a fund approaches and exceeds 100%.

5605 North MacArthur Boulevard | Suite 870 | Irving, Texas 75038-2631

Actuary's Certification Letter *(Continued)*

To accomplish this, the Board's funding policy requires that the employer contribution rate be at least equal to the sum of the employer normal cost rate (which pays the current year's cost) and an amortization rate which results in the amortization of the UAAL over 20 years in installments that increase at the assumed rate of growth in payroll for URS.

Under this policy, the objective of maintaining a relatively level contribution rate over time is achieved in normal conditions such as consistent financial markets.

Section 49-11-301(5) of the Utah Code allows the Board to set the employer contribution rate at the prior year's rate, if the rate otherwise would decrease and if the funded ratio is less than 110%. In such a case, the rate set by the Board would be higher than the actuarially determined contribution rate. The purpose of this legislation is to enhance the Board's ability to maintain more level contribution rates while targeting a 100% - 110% funded level. The Board has historically followed this policy, so the certified contribution rate may be greater than the actuarially determined rate. However, as the funded ratios of the funds continue to improve, the Board may elect to decrease the contribution rate in an orderly manner as the funded ratio for funds approach and exceed 100%.

Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches at least 100%.

Since the prior year's valuation, the funded ratio on a combined basis increased from 88.8% to 93.2%. Absent unfavorable actuarial experience, we expect the funded ratio to continue to increase and be maintained in future years.

If market value of assets had been used in the calculation instead of actuarial value of assets, the aggregate funded ratio for all funds combined would have been 104.3% compared to 94.5% in the prior year. The increase in the funded ratio on a fair value of asset basis is attributable to the 17.2% return (on a time weighted basis) on the Systems' assets during the prior year and the current contribution effort to finance the unfunded actuarial accrued liability.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2022. There were no legislative changes enacted since the previous valuation that had a measurable effect on the current valuation.

Assumptions and methods

The Board, in consultation with its actuary, sets the actuarial assumptions and methods used in the valuation. Current Board policy is to have the actuary perform an experience study every three years. In connection with the appropriate valuation, the actuary conducts a thorough review of plan experience, and then makes recommendations to the Board. A review of the demographic assumptions was performed as of January 1, 2020 and a review of the economic assumptions was performed as of January 1, 2021. There were no changes in the actuarial assumptions used to prepare this year's actuarial valuation.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and calculated contribution rates. It is our opinion that the assumptions used to perform this valuation are internally consistent and are reasonable based on past and anticipated future experience of the System. Also, these assumptions and methods used for funding purposes satisfy the parameters set by the Actuarial Standards of Practice.



Actuary's Certification Letter *(Concluded)*

This valuation was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Data

Member data for retired, active and inactive members was supplied as of December 31, 2021 by the URS staff. The staff also supplied asset information as of December 31, 2021. We did not audit this data, but we did apply a number of tests to the data and concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by URS.

GRS prepared the following schedules in the actuarial section: *Summary of Actuarial Assumptions and Methods, Analysis of Financial Experience, and the Member and Employer Contribution Rates.* In addition, GRS prepared the following schedules in the financial section in accordance with GASB Statement No. 67: *Net Pension Liability of Employers, Changes in Discount Rate, Schedule of Changes in the Employers' Net Pension Liability, Schedule of Employers' Net Pension Liability, and the Schedules of Employer Contributions.*

URS relied upon the data prepared by GRS to prepare the following schedules: Calculation of Actuarial Value of Assets, Actuarial Value of Assets by System, Schedules of Funding Progress, Solvency Tests, Schedules of Active Member Valuation Data, and the Schedules of Retirants and Beneficiaries.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of URS as of January 1, 2022.

All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Utah state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. White and Ms. Shaw are Enrolled Actuaries, Members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. All of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,



Daniel J. White, FSA, EA, MAAA
Senior Consultant



Lewis Ward
Consultant

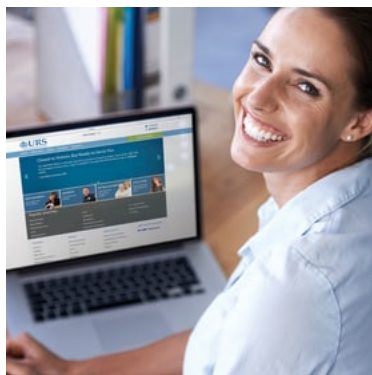


Janie Shaw, ASA, EA, MAAA
Consultant



Summary of Actuarial Assumptions and Methods

As of January 1, 2022



- a)** The actuarial valuation was prepared using the entry age actuarial cost method. As described in the certification letter, the contribution rates are set based on the board's funding policy, which states the contribution rate will not be less than the amount needed to amortize the unfunded actuarial accrued liability of each System over a 20-year period from the valuation date (January 1, 2020).

In calculating this minimum, amortization payments are designed to remain level as a percent of payroll, and payroll is assumed to increase 2.90% per year. Under this method, actuarial gains and losses are identified and amortized as part of the unfunded actuarial accrued liability over a period that does not exceed 20 years.

- b)** The future investment earnings of the assets of the Systems are assumed to accrue at an annual rate of 6.85%, compounded annually. This rate is made up of a 2.50% assumed inflation rate and a 4.35% assumed real rate of return. This assumption was adopted effective January 1, 2022.

- c)** The total rates of assumed annual salary increase are shown on the actuarial schedule on page 173. The rates include increases due to promotion and longevity and a 3.25% per annum rate of increase in the general wage level of the membership. Salaries of judges are assumed to increase at 3.25%. All of these assumptions were adopted effective January 1, 2020.
- d)** Post-retirement benefit increases are based on the consumer price index (CPI), limited by the provisions of each System. The increases are assumed to be 2.5% for all Systems. Increases are based on the member's original retirement allowance except in the Judges Retirement System where increases are compounded. For current retirees who have received cumulative COLAs less than the total of annual CPI increases since retirement, higher COLAs are assumed, subject to the annual maximum (2.5% or 4% for Public Safety and 4% for all other Systems), as long as the member has "banked" CPI increases remaining.

Summary of Actuarial Assumptions and Methods *(Continued)*

- e) Tables of mortality rates for male members retired for service and beneficiaries were developed from actual experience of URS retirees. Mortality rates for female members retired for service and beneficiaries were developed from actual experience of the URS retirees.

The mortality basis is adjusted based upon the member's class and gender as shown to the right. These base rates are adjusted for future improvement in mortality using 80% of the ultimate rates from the published MP-2019 mortality improvement scale projected from the year 2020. All of these rates were adopted effective January 1, 2020. Mortality rates for active members use the PUB-2010 Employees Mortality Table for public employees, teachers, and public safety members, as applicable for each member's employee group. The assumptions were adopted effective January 1, 2020.

Retired Member Mortality

Class of Member

Educators and Judges

Men	2020URSM (90%)
Women	2020URSF (90%)

Public Safety and Firefighters

Men	2020URSM (110%)
Women	2020URSF (110%)

Local Government, Public Employees

Men	2020URSM (110%)
Women	2020URSF (110%)

2020URSM = Constructed Mortality table based on actual experience of male URS retirees multiplied by given percentage

2020URSF = Constructed Mortality table based on actual experience of female URS retirees multiplied by given percentage

- f) Mortality among disabled members is based on 115% of the PUB-2010 Disabled Retiree Table for general employees for males, and 125% of the PUB-2010 Disabled Retiree Table for general employees for females. The rates for males and females are also adjusted for future improvement in mortality using 80% of the ultimate rates from the published MP-2019 mortality scale from the year 2010.
- g) Other demographic assumptions regarding retirement, mortality, disablement, and termination from employment are illustrated in the following actuarial schedules.

The retirement assumptions illustrated for the Noncontributory and Contributory Retirement Systems (and the Tier 2 Public Employees Retirement System) are for members eligible for unreduced retirement benefits. The retirement assumptions illustrated for the Public Safety, Firefighters, and Judges Retirement Systems are for members of the Systems who are eligible to retire with 30 years of service (35 years of service for Tier 2). For public employees the rates vary by age and eligibility for reduced or unreduced retirement. For Public Safety, Firefighters, and Judges the rates vary by age and service groupings.

Rates of assumed termination from employment are assumed to vary by years of service. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately. Vested members are assumed to withdraw their contributions and forfeit the right to further benefits at the rates illustrated.

- h) The Retirement Board uses the expected rate of return method for calculating the actuarial value of assets. This method is based on the total earnings of the commingled investments and spreads the excess/shortfall of actual investment returns over or under the expected return over five years. One-fifth of the excess/shortfall is recognized each year. The actuarial values of assets under this method were calculated and reported to us by the Systems' staff.
- i) All of the demographic assumptions were renewed or adopted by the Retirement Board in 2020 and the investment return assumption was adopted by the Board in 2021, all as recommended by the actuary. The assumptions for Tier 2 members are the same as the Tier 1 members, except for retirement rates.

Summary of Actuarial Assumptions and Methods (Continued)

Percent Retiring Within Next Year Among Active Members								
Eligible for Retirement								
Male								
Female								
State and School Division								
Local Government Division								
State and School Division								
Local Government Division								
Governors and Legislators Retirement Plan								
Retirement Age	Educators	Public Employees	Local Government Division	Educators	Public Employees	Local Government Division		
Tier 1 Noncontributory and Contributory Retirement Systems <i>Adopted January 1, 2020</i>	50	20.00%	15.00%	15.00%	30.00%	17.00%	12.00%	0.00%
	51	20.00	15.00	15.00	30.00	16.00	12.00	0.00
	52	20.00	15.00	15.00	30.00	16.00	12.00	0.00
	53	20.00	15.00	15.00	14.00	16.00	12.00	0.00
	54	15.00	15.00	15.00	14.00	16.00	12.00	0.00
	55	15.00	16.00	15.00	14.00	16.00	15.00	0.00
	56	15.00	16.00	15.00	18.00	16.00	15.00	0.00
	57	15.00	16.00	15.00	18.00	16.00	15.00	0.00
	58	15.00	16.00	15.00	18.00	20.00	15.00	0.00
	59	15.00	16.00	15.00	18.00	20.00	20.00	0.00
	60	23.00	20.00	20.00	30.00	25.00	20.00	0.00
	61	23.00	20.00	20.00	30.00	25.00	20.00	0.00
	62	33.00	30.00	23.00	35.00	33.00	28.00	100.00
	63	33.00	30.00	23.00	35.00	33.00	28.00	100.00
	64	33.00	30.00	23.00	35.00	33.00	28.00	100.00
	65	33.00	22.00	23.00	35.00	28.00	28.00	100.00
	66	33.00	22.00	23.00	35.00	28.00	28.00	100.00
	67	30.00	22.00	22.00	35.00	28.00	28.00	100.00
	68	30.00	22.00	22.00	28.00	22.00	28.00	100.00
	69	25.00	22.00	22.00	28.00	22.00	28.00	100.00
	70	20.00	22.00	22.00	28.00	22.00	30.00	100.00
	71	20.00	22.00	22.00	28.00	22.00	30.00	100.00
	72	20.00	22.00	22.00	28.00	22.00	30.00	100.00
	73	20.00	22.00	22.00	28.00	22.00	25.00	100.00
	74	20.00	22.00	22.00	28.00	22.00	25.00	100.00
	75	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Percent Retiring Within Next Year Among Active Members Eligible for Retirement												
Retirement Age												
Retirement Age												
Tier 1 Public Safety Retirement Systems <i>Adopted January 1, 2020</i>	45	15.00%	50	15.00%	55	15.00%	59	20.00%	63	30.00%	67	50.00%
	46	15.00	51	15.00	56	15.00	60	20.00	64	30.00	68	50.00
	47	15.00	52	15.00	57	15.00	61	20.00	65	30.00	69	50.00
	48	15.00	53	15.00	58	15.00	62	30.00	66	40.00	70	100.00
	49	15.00	54	15.00								

Percent Retiring Within Next Year Among Active Members Eligible for Retirement												
Retirement Age												
Retirement Age												
Tier 1 Firefighters Retirement Systems <i>Adopted January 1, 2020</i>	45	15.00%	50	15.00%	55	15.00%	59	20.00%	63	25.00%	67	50.00%
	46	15.00	51	15.00	56	15.00	60	20.00	64	25.00	68	50.00
	47	15.00	52	15.00	57	15.00	61	20.00	65	50.00	69	50.00
	48	15.00	53	15.00	58	20.00	62	25.00	66	50.00	70	100.00
	49	15.00	54	15.00								

Percent Retiring Within Next Year Among Active Members Eligible for Retirement												
Retirement Age												
Retirement Age												
Judges Retirement Systems <i>Adopted January 1, 2020</i>	45	10.00%	50	10.00%	55	10.00%	59	10.00%	63	10.00%	67	25.00%
	46	10.00	51	10.00	56	10.00	60	10.00	64	20.00	68	25.00
	47	10.00	52	10.00	57	10.00	61	10.00	65	20.00	69	25.00
	48	10.00	53	10.00	58	10.00	62	10.00	66	25.00	70	100.00
	49	10.00	54	10.00								

Summary of Actuarial Assumptions and Methods (Continued)

Percent Retiring Within Next Year Among Active Members							
Eligible for Retirement							
Male				Female			
Retirement Age	State and School Division			Local Government Division	State and School Division		
	Educators	Public Employees			Educators	Public Employees	Local Government Division
Tier 2 Public Employees Retirement System <i>Adopted January 1, 2020</i>	50	20.00%	15.00%	15.00%	30.00%	17.00%	12.00%
	51	20.00	15.00	15.00	30.00	16.00	12.00
	52	20.00	15.00	15.00	30.00	16.00	12.00
	53	20.00	15.00	15.00	14.00	16.00	12.00
	54	15.00	15.00	15.00	14.00	16.00	12.00
	55	15.00	16.00	15.00	14.00	16.00	15.00
	56	15.00	16.00	15.00	18.00	16.00	15.00
	57	15.00	16.00	15.00	18.00	16.00	15.00
	58	15.00	16.00	15.00	18.00	20.00	15.00
	59	15.00	16.00	15.00	18.00	20.00	20.00
	60	23.00	20.00	20.00	30.00	25.00	20.00
	61	23.00	20.00	20.00	30.00	25.00	20.00
	62	33.00	30.00	23.00	35.00	33.00	28.00
	63	33.00	30.00	23.00	35.00	33.00	28.00
	64	33.00	30.00	23.00	35.00	33.00	28.00
	65	33.00	22.00	23.00	35.00	28.00	28.00
	66	33.00	22.00	23.00	35.00	28.00	28.00
	67	30.00	22.00	22.00	35.00	28.00	28.00
	68	30.00	22.00	22.00	28.00	22.00	28.00
	69	25.00	22.00	22.00	28.00	22.00	28.00
	70	20.00	22.00	22.00	28.00	22.00	30.00
	71	20.00	22.00	22.00	28.00	22.00	30.00
	72	20.00	22.00	22.00	28.00	22.00	30.00
	73	20.00	22.00	22.00	28.00	22.00	25.00
	74	20.00	22.00	22.00	28.00	22.00	25.00
	75	100.00	100.00	100.00	100.00	100.00	100.00

Retirement rates at the age the member is first eligible for an unreduced retirement benefit prior to age 65 is increased by 30%.

Percent Retiring Within Next Year Among Active Members Eligible for Retirement										
Retirement Age		Retirement Age		Retirement Age		Retirement Age		Retirement Age		
Tier 2 Public Safety and Firefighter Retirement System <i>Adopted January 1, 2020</i>	45	15.00%	50	15.00%	55	15.00%	59	20.00%	63	30.00%
	46	15.00	51	15.00	56	15.00	60	20.00	64	30.00
	47	15.00	52	15.00	57	15.00	61	20.00	65	30.00
	48	15.00	53	15.00	58	15.00	62	30.00	66	40.00
	49	15.00	54	15.00					70	100.00

Retirement rates at the age the member is first eligible for an unreduced retirement benefit prior to age 65 is increased by 10%.

Percent Retiring Within Next Year Among Active Members Eligible for Retirement										
Retirement Age		Retirement Age		Retirement Age		Retirement Age		Retirement Age		
Firefighters <i>Adopted January 1, 2020</i>	45	15.00%	50	15.00%	55	15.00%	59	20.00%	63	25.00%
	46	15.00	51	15.00	56	15.00	60	20.00	64	25.00
	47	15.00	52	15.00	57	15.00	61	20.00	65	50.00
	48	15.00	53	15.00	58	20.00	62	25.00	66	50.00
	49	15.00	54	15.00					70	100.00

Retirement rates at the age the member is first eligible for an unreduced retirement benefit prior to age 65 is increased by 10%.

Summary of Actuarial Assumptions and Methods (Continued)

Other Termination of Employment of Active Members Separating Within Next Year								
Years of Service	Male			Female			Governors and Legislators Retirement Plan	
	State and School Division		Local Government Division	State and School Division		Local Government Division		
	Educators	Public Employees		Educators	Public Employees			
Noncontributory and Contributory Retirement Systems <i>Adopted January 1, 2020</i>	0	16.00%	27.00%	18.00%	17.00%	28.00%	24.00%	10.00%
	1	12.00	20.00	13.00	14.00	21.00	18.00	10.00
	2	8.50	12.00	9.00	11.00	15.00	14.00	10.00
	3	7.00	10.00	8.50	10.00	13.00	12.00	10.00
	4	6.50	9.00	7.50	9.00	11.00	11.00	10.00
	5	6.00	8.00	7.00	8.00	10.00	9.50	10.00
	6	5.50	7.00	6.50	7.00	8.50	9.00	10.00
	7	4.50	6.00	5.50	5.50	7.25	8.00	10.00
	8	4.00	5.00	5.00	4.75	6.25	6.50	10.00
	9	3.50	5.00	4.50	4.25	5.75	6.50	10.00
	10	3.00	4.50	4.00	4.00	5.25	5.50	10.00
	11	2.75	4.50	3.50	3.50	4.50	5.00	10.00
	12	2.75	4.00	3.25	3.00	4.25	4.75	10.00
	13	2.25	3.75	3.00	2.50	4.00	4.50	10.00
	14	2.00	3.50	3.00	2.00	3.75	4.00	10.00
	15	2.00	3.00	2.75	2.00	3.50	4.00	10.00
	16	2.00	2.75	2.75	1.75	3.00	3.75	10.00
	17	2.00	2.50	2.50	1.75	2.75	3.50	10.00
	18	2.00	2.00	2.50	1.75	2.75	3.00	10.00
	19	1.50	2.00	2.50	1.50	2.75	3.00	10.00
	20	1.50	2.00	2.00	1.50	2.75	2.50	10.00
	21	1.50	2.00	2.00	1.50	2.50	2.50	10.00
	22	1.50	2.00	1.75	1.50	2.25	2.25	10.00
	23	1.50	1.50	1.50	1.50	2.00	2.00	10.00
	24	1.50	1.50	1.25	1.50	2.00	2.00	10.00
	25	1.00	1.00	1.00	1.00	1.00	1.00	10.00

Other Termination of Employment of Active Members Separating Within Next Year										
Years of Service	Years of Service		Years of Service		Years of Service		Years of Service			
	Public Safety Retirement System <i>Adopted January 1, 2020</i>	0	15.00%	5	4.50%	9	3.00%	13	2.00%	17
	1	8.00	6	4.00	10	2.50	14	1.75	18	1.50
	2	6.50	7	4.00	11	2.50	15	1.75	19	1.50
	3	6.00	8	3.50	12	2.00	16	1.50	20+	1.00
	4	5.00								

Other Termination of Employment of Active Members Separating Within Next Year										
Years of Service	Years of Service		Years of Service		Years of Service		Years of Service			
	Firefighters Retirement System <i>Adopted January 1, 2020</i>	0	7.00%	5	2.50%	9	1.50%	13	0.50%	17
	1	5.50	6	2.00	10	1.50	14	0.50	18	0.50
	2	4.00	7	1.75	11	1.50	15	0.50	19	0.50
	3	3.50	8	1.50	12	1.00	16	0.50	20+	0.50
	4	3.00								

Other Termination of Employment of Active Members Separating Within Next Year	
Judges Retirement System <i>Adopted January 1, 1993</i>	None assumed.

Summary of Actuarial Assumptions and Methods (Concluded)

	Total Annual Increase in Salary (Male and Female)											
	State and School Division						State and School Division					
	Years of Service	Educators	Public Employees	Local Government Division	Public Safety Retirement System	Firefighters Retirement System	Years of Service	Educators	Public Employees	Local Government Division	Public Safety Retirement System	Firefighters Retirement System
All Retirement Systems	0	9.25%	8.25%	8.25%	6.75%	8.50%	13	4.75%	4.25%	4.00%	4.50%	4.50%
<i>Adopted January 1, 2020</i>	1	8.50	7.50	7.00	6.00	8.00	14	4.50	4.00	4.00	4.50	4.25
	2	7.50	6.50	6.50	6.00	7.75	15	4.25	3.75	4.00	4.50	4.25
	3	7.25	6.00	6.00	6.00	7.50	16	4.00	3.75	3.75	4.25	4.25
	4	7.00	5.75	5.50	6.00	7.50	17	3.75	3.75	3.75	4.00	4.00
	5	6.75	5.25	5.25	6.00	7.25	18	3.75	3.75	3.75	4.00	3.75
	6	6.75	5.00	5.00	5.75	7.25	19	3.75	3.75	3.50	4.00	3.75
	7	6.50	4.75	4.75	5.50	6.75	20	3.75	3.50	3.50	4.00	3.75
	8	6.50	4.75	4.50	5.25	6.50	21	3.75	3.50	3.50	3.75	3.50
	9	6.25	4.50	4.50	5.25	6.00	22	3.75	3.50	3.50	3.75	3.50
	10	5.75	4.50	4.25	5.00	5.50	23	3.50	3.50	3.25	3.50	3.50
	11	5.50	4.25	4.00	4.75	5.00	24	3.50	3.25	3.25	3.50	3.25
	12	5.25	4.25	4.00	4.50	4.75	25+	3.25	3.25	3.25	3.25	3.25

	Probability of Mortality Within the Next Year for Active Members													
	Age	Male				Female				Age	Male		Female	
		Educators	Local Government and Public Employees	Educators	Local Government and Public Employees	Educators	Local Government and Public Employees	Educators	Local Government and Public Employees		Educators	Local Government and Public Employees		
Noncontributory and Contributory Retirement Systems	20	0.0340%	0.0370%	0.0130%	0.0130%	50	0.1110%	0.1490%	0.0730%	0.0830%				
<i>Adopted January 1, 2020</i>	25	0.0160	0.0280	0.0090	0.0090	55	0.1720	0.2190	0.1070	0.1230				
	30	0.0220	0.0360	0.0140	0.0150	60	0.2640	0.3190	0.1610	0.1860				
	35	0.0300	0.0470	0.0200	0.0230	65	0.4350	0.4680	0.2700	0.2960				
	40	0.0420	0.0660	0.0310	0.0360	70	0.7090	0.7030	0.4850	0.4890				
	45	0.0670	0.0980	0.0480	0.0560									

	Percent Electing a Refund of Contributions Upon Termination While Vested								
	Years of Service	Male				Female			
		Educators	Public Employees	Local Government Division	Educators	Public Employees	Local Government Division	Educators	Public Employees
Noncontributory and Contributory Retirement Systems	0-3	100%	100%	100%	100%	100%	100%	100%	100%
<i>Adopted January 1, 1993</i>	4	75	86	75	65	80	77		
	5	73	83	73	64	79	75		
	10	54	73	61	53	64	61		
	15	33	63	49	32	52	40		
	19	9	29	23	8	22	13		
	20	0	0	0	0	0	0		

	Probability of Mortality Within the Next Year for Active Members										
	Age	Public Safety and Firefighters Employees			Age	Public Safety and Firefighters Employees			Age	Public Safety and Firefighters Employees	
		Male	Female	Age		Male	Female	Age		Male	Female
Public Safety Retirement System and Firefighters Retirement System	20	0.0410%	0.0160%	40	0.0590%	0.0490%	60	0.2640%	0.1680%		
<i>Adopted January 1, 2020</i>	25	0.0370	0.0200	45	0.0820	0.0670	65	0.4100	0.2280		
	30	0.0410	0.0270	50	0.1200	0.0910	70	0.7660	0.4540		
	35	0.0470	0.0360	55	0.1750	0.1230					

	Percent Electing a Refund of Contributions Upon Termination While Vested					
	Years of Service	Public Safety and Firefighters Retirement Employees			Years of Service	Public Safety and Firefighters Retirement Employees
		Public Safety and Firefighters Retirement Employees	Public Safety and Firefighters Retirement Employees	Public Safety and Firefighters Retirement Employees		
Public Safety Retirement System and Firefighters Retirement System	0-3	100%		15	35%	
<i>Adopted January 1, 1993</i>	4	76		19	15	
	5	74		20	0	
	10	57				

Calculation of Actuarial Value of Assets

December 31, 2022 (dollars in thousands)				January 1, 2022 (dollars in thousands)			
1. Fair value of assets				1. Fair value of assets			
\$ 42,074,517				\$ 45,052,735			
2. Deferral to smooth asset values based on(excess)/ shortfall of expected investment income for:				2. Deferral to smooth asset values based on (excess)/ shortfall of expected investment income for:			
Year	Total Excess/ (shortfall)	% Deferred	Amount Deferred	Year	Total Excess/ (shortfall)	% Deferred	Amount Deferred
a. 2022	\$ (5,435,791)	80%	\$ (4,348,632)	a. 2021	\$ 4,003,316	80%	\$ 3,202,653
b. 2021	4,003,316	60%	2,401,990	b. 2020	1,941,476	60%	1,164,887
c. 2020	1,941,476	40%	776,590	c. 2019	2,279,189	40%	911,676
d. 2019	2,279,189	20%	455,838	d. 2018	(2,327,819)	20%	(465,564)
e. 2018	(2,327,819)	—%	—	e. 2017	1,792,944	—%	—
f. Total deferred gains (losses)			\$ (714,214)	f. Total deferred gains (losses)			\$ 4,813,651
g. Total deferred (gains) losses			714,214	g. Total deferred (gains) losses			(4,813,651)
3. Actuarial value of assets available for benefits*				3. Actuarial value of assets available for benefits*			
\$ 42,788,731				\$ 40,239,084			

*Actuarial value of assets cannot exceed 125% of the fair value of assets or below 75% of the fair value of assets.

Actuarial Value of Assets by System

	January 1, 2022 (in thousands)								
	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Governors and Legislators Plan	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System	Total All Systems
1. Net assets available for benefits at fair value	\$ 35,068,535	1,447,237	5,105,393	1,799,463	282,030	13,425	1,154,018	182,634	45,052,735
2. Adjustments to smooth asset values based on (excess)/shortfall of expected investment income on fair value for:	(3,761,632)	(161,835)	(546,740)	(192,085)	(30,309)	(1,510)	(104,152)	(15,388)	(4,813,651)
3. Actuarial value of assets available for benefits (1-2)	\$ 31,306,903	1,285,402	4,558,653	1,607,378	251,721	11,915	1,049,866	167,246	40,239,084

	December 31, 2022 (in thousands)								
	Noncontributory System	Contributory System	Public Safety System	Firefighters System	Judges System	Governors and Legislators Plan	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System	Total All Systems
1. Net assets available for benefits at fair value	\$ 32,602,563	1,216,375	4,769,175	1,685,243	262,307	12,122	1,303,331	223,401	42,074,517
2. Adjustments to smooth asset values based on (excess)/shortfall of expected investment income on fair value for:	535,435	11,708	80,376	29,108	4,267	133	44,450	8,737	714,214
3. Actuarial value of assets available for benefits (1-2)	\$ 33,137,998	1,228,083	4,849,551	1,714,351	266,574	12,255	1,347,781	232,138	42,788,731

Analysis of Financial Experience

(in thousands)

System	January 1, 2021 Unfunded Actuarial Accrued Liability	Amortization Payments	Liability (Gain) Loss	Asset (Gain) Loss	Changes in Actuarial Assumptions	Change in Benefit Provisions	Asset Transfers	January 1, 2022 Unfunded Actuarial Accrued Liability
Noncontributory Retirement System	\$ 3,861,195	(290,658)	322,660	(1,304,534)	—	—	(58,386)	2,530,277
Contributory Retirement System	35,923	(425)	12,915	(84,640)	—	—	58,386	22,159
Public Safety Retirement System	606,011	(38,537)	17,032	(192,641)	—	—	—	391,865
Firefighters Retirement System	(45,899)	(21,279)	2,644	(67,714)	—	—	—	(132,248)
Judges Retirement System	47,288	(746)	1,569	(10,740)	—	—	—	37,371
Utah Governors and Legislators Retirement Plan	2,069	(189)	47	(547)	—	—	—	1,380
Tier 2 Public Employees Contributory Retirement System	85,223	9,104	19,231	(33,069)	—	—	—	80,489
Tier 2 Public Safety and Firefighter Contributory Retirement System	16,804	489	(4,164)	(4,790)	—	—	—	8,339

Member and Employer Contribution Rates

As of December 31

System	Year	Contributory				Noncontributory	
		Member	Employer		Employer		
			State and School	Local Government	State and School	Local Government	
Noncontributory and Contributory Retirement Systems	2013	6.00%	15.97%	13.28%	20.46%	17.29%	
	2014	6.00	17.70	14.46	22.19	18.47	
	2015	6.00	17.70	14.46	22.19	18.47	
	2016	6.00	17.70	14.46	22.19	18.47	
	2017	6.00	17.70	14.46	22.19	18.47	
	2018	6.00	17.70	14.46	22.19	18.47	
	2019	6.00	17.70	14.46	22.19	18.47	
	2020	6.00	17.70	14.46	22.19	18.47	
	2021	6.00	17.70	14.46	22.19	18.47	
	2022	6.00	17.70	13.96	22.19	17.97	

System	Year	Division A (with Social Security)		Division B (without Social Security)		All Divisions Fire Insurance Premium Tax
		Member	Employer	Member	Employer	
Firefighters Retirement System	2013	15.05%	2.96%	16.71%	4.46%	11.75%
	2014	15.05	3.82	16.71	6.59	11.71
	2015	15.05	3.99	16.71	6.76	11.54
	2016	15.05	3.89	16.71	6.66	11.64
	2017	15.05	3.93	16.71	6.70	11.60
	2018	15.05	4.61	16.71	7.24	11.06
	2019	15.05	4.61	16.71	7.24	11.06
	2020	15.05	4.61	16.71	7.24	11.06
	2021	15.05	4.61	16.71	7.24	11.06
	2022	15.05	3.61	16.71	6.24	11.06

System	Year	Judges				Governors and Legislators Appropriation
		Contributory		Noncontributory		
		Member	Employer	Employer	Court Fees	
Judges Retirement System	2013	—	—	35.66%	12.74%	\$ 252,000
	2014	—	—	40.01	11.90	411,489
	2015	—	—	41.58	10.33	421,009
	2016	—	—	42.12	9.79	404,409
Utah Governors and Legislators Retirement Plan	2017	—	—	42.39	9.22	391,883
	2018	—	—	43.68	8.23	384,103
	2019	—	—	43.75	8.16	369,226
	2020	—	—	44.31	7.60	361,437
	2021	—	—	44.38	7.53	422,455
	2022	—	—	44.76	7.15	359,939

Member and Employer Contribution Rates *(Continued)*

As of December 31

	Year	State of Utah		2.5% COLA Other Division A (with Social Security)		4% COLA Other Division A (with Social Security)		Bountiful	
		Member	Employer	Member	Employer	Member	Employer	Member	Employer
Public Safety Retirement System Noncontributory Division A	2013	—	39.31%	—	32.14%	—	34.17%	—	42.79%
	2014	—	41.35	—	34.04	—	35.71	—	47.33
	2015	—	41.35	—	34.04	—	35.71	—	47.33
	2016	—	41.35	—	34.04	—	35.71	—	47.33
	2017	—	41.35	—	34.04	—	35.71	—	49.58
	2018	—	41.35	—	34.04	—	35.71	—	50.38
	2019	—	41.35	—	34.04	—	35.71	—	50.38
	2020	—	41.35	—	34.04	—	35.71	—	50.38
	2021	—	41.35	—	34.04	—	35.71	—	50.38
	2022	—	41.35	—	34.04	—	35.71	—	50.38

Public Safety Retirement System Contributory Division A	2013	12.29 %	27.63 %	12.29%	20.83%	12.29%	22.75%	—	—
	2014	12.29	29.70	12.29	22.75	12.29	24.33	—	—
	2015	12.29	29.70	12.29	22.75	12.29	24.33	—	—
	2016	12.29	29.70	12.29	22.75	12.29	24.33	—	—
	2017	12.29	29.70	12.29	22.75	12.29	24.33	—	—
	2018	—*	—*	12.29	22.79	12.29	24.37	—	—
	2019	—*	—*	12.29	22.79	12.29	24.37	—	—
	2020	—*	—*	12.29	22.79	12.29	24.37	—	—
	2021	—*	—*	12.29	22.79	12.29	24.37	—	—
	2022	—*	—*	12.29	22.79	12.29	24.37	—	—

	Year	Salt Lake City		Ogden		Logan		Provo		2.5% COLA Other Division B (without Soc Sec)		4% COLA Other Division B (without Soc Sec)	
		Member	Employer	Member	Employer	Member	Employer	Member	Employer	Member	Employer	Member	Employer
Public Safety Retirement System Noncontributory Division B	2013	—	44.83%	—	44.98%	—	39.84%	—	39.97%	—	32.20%	—	37.45%
	2014	—	46.67	—	48.68	—	41.92	—	42.16	—	34.04	—	38.94
	2015	—	46.67	—	48.68	—	41.92	—	42.16	—	34.04	—	38.94
	2016	—	46.67	—	48.68	—	41.92	—	42.16	—	34.04	—	38.94
	2017	—	46.67	—	48.68	—	41.92	—	42.16	—	34.04	—	38.94
	2018	—	46.71	—	48.72	—	41.97	—	42.23	—	32.28	—	38.97
	2019	—	46.71	—	48.72	—	41.97	—	42.23	—	32.28	—	38.97
	2020	—	46.71	—	48.72	—	41.97	—	42.23	—	32.28	—	38.97
	2021	—	46.71	—	48.72	—	41.97	—	42.23	—	32.28	—	38.97
	2022	—	46.71	—	48.72	—	41.97	—	42.23	—	32.28	—	37.97
Public Safety Retirement System Contributory Division B	2013	—	—	—	—	11.13%	29.76%	—	—	10.50%	22.29%	10.50%	27.49%
	2014	—	—	—	—	11.13	31.80	—	—	10.50	22.29	10.50	28.95
	2015	—	—	—	—	11.13	31.80	—	—	10.50	22.29	10.50	28.95
	2016	—	—	—	—	11.13	31.80	—	—	10.50	22.29	10.50	28.95
	2017	—	—	—	—	11.13	31.80	—	—	10.50	22.29	10.50	28.95
	2018	—	—	—	—	—*	—*	—	—	10.50	22.81	10.50	28.98
	2019	—	—	—	—	—*	—*	—	—	10.50	22.81	10.50	28.98
	2020	—	—	—	—	—*	—*	—	—	10.50	22.81	10.50	28.98
	2021	—	—	—	—	—	—	—	—	10.50	22.81	10.50	28.98
	2022	—	—	—	—	—*	—*	—	—	10.50	22.81	10.50	27.98

*No active participants in the system.

Member and Employer Contribution Rates *(Continued)*

As of December 31

System	Year	Contributory		Noncontributory	
		Member	Employer	Employer	Employer
			Local Government	State and School	Local Government
Tier 2 Public Employees Contributory Retirement System*	2012	—	14.51%	15.06%	12.74%
	2013	—	15.75	16.75	13.99
	2014	—	16.70	18.27	14.94
	2015	—	16.67	18.24	14.91
	2016	—	16.67	18.24	14.91
	2017	—	16.67	18.44	15.11
	2018	—	17.30	18.87	15.54
	2019	—	17.42	18.99	15.66
	2020	—	17.56	19.13	15.80
	2021	—	17.95	20.02	16.19

Tier 2 Public Safety and Firefighter Contributory Retirement System*

	Year	Member	State of Utah		2.5% COLA Other Division A (with Soc Sec)	4% COLA Other Division A (with Soc Sec)
			Employer	Bountiful Employer	Employer	Employer
Public Safety Noncontributory Division A	2012	—	25.46%	25.89%	19.25%	21.94%
	2013	—	27.40	31.38	20.85	22.37
	2014	—	29.26	35.68	22.55	23.71
	2015	—	29.21	35.63	22.50	23.66
	2016	—	29.21	35.63	22.50	23.66
	2017	—	29.28	37.71	22.57	23.73
	2018	—	29.80	38.23	23.09	24.25
	2019	—	29.84	38.27	23.13	24.29
	2020	2.27%	32.54	40.97	25.83	26.99
	2021	2.59	32.54	40.97	25.83	26.99
Public Safety Contributory Division A	2012	—	—	—	19.25	21.94
	2013	—	—	—	20.85	22.37
	2014	—	—	—	20.66	23.71
	2015	—	—	—	20.61	23.66
	2016	—	—	—	20.61	23.66
	2017	—	—	—	20.61	23.73
	2018	—	—	—	23.11	24.27
	2019	—	—	—	23.15	24.31
	2020	2.27%	—	—	25.85	27.01
	2021	2.59	—	—	25.85	27.01

*Includes active member death benefit and Tier 1 amortization rate.
Does not include the 401(k) component of the contribution rate.

Member and Employer Contribution Rates *(Concluded)*

As of December 31

Tier 2 Public Safety and Firefighter Contributory Retirement System *(Continued)**

	Year	Member	Salt Lake City		Ogden	Logan	Provo	2.5% COLA Other Division B (without Soc Sec)	4% COLA Other Division B (without Soc Sec)
			Employer	Employer	Employer	Employer	Employer	Employer	Employer
Public Safety Noncontributory Division B	2012	—	30.47%	30.78%	26.59%	27.08%	20.71%	25.05%	
	2013	—	33.27	33.47	28.19	28.19	20.77	25.38	
	2014	—	34.97	37.07	30.13	30.36	20.55	26.72	
	2015	—	34.92	37.02	30.08	30.31	20.39	26.67	
	2016	—	34.92	37.02	30.08	30.31	20.39	26.67	
	2017	—	34.99	37.09	30.38	30.38	20.50	26.74	
	2018	—	35.54	37.64	30.71	30.95	21.00	27.28	
	2019	—	35.58	37.68	30.75	30.99	21.04	27.32	
	2020	2.27%	38.28	40.38	33.45	33.69	23.74	30.02	
	2021	2.59	38.28	40.38	33.45	33.69	23.74	29.02	
Public Safety Contributory Division B	2012	—	—	—	—	—	20.71%	25.05%	
	2013	—	—	—	—	—	20.77	25.38	
	2014	—	—	—	—	—	20.55	26.72	
	2015	—	—	—	—	—	20.50	26.67	
	2016	—	—	—	—	—	20.50	26.67	
	2017	—	—	—	—	—	20.57	26.74	
	2018	—	—	—	—	—	21.11	27.28	
	2019	—	—	—	—	—	21.15	27.32	
	2020	2.27%	—	—	—	—	23.85	30.02	
	2021	2.59	—	—	—	—	23.85	29.02	
Firefighters	2012	—	Other Division A (with Social Security)		Other Division B (with Social Security)				
			Employer	Employer	Employer	Employer			
	2012	—	11.10%	11.10%					
	2013	—	11.02	11.02					
	2014	—	10.80	10.80					
	2015	—	10.75	10.75					
	2016	—	10.75	10.75					
	2017	—	10.82	10.82					
	2018	—	11.34	11.34					
	2019	—	11.38	11.38					
2020	2.27%	14.08	14.08						
2021	2.59	14.08	14.08						

*Includes active member death benefit and Tier 1 amortization rate. Does not include the 401(k) component of the contribution rate.

Schedules of Funding Progress

(dollars in thousands)

System	Date	Based on Actuarial Value of Assets					
		(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Unfunded AAL (UAAL) Actuarial Value of Assets (2) - (1)	(4) Funded Ratios Based on Actuarial Value of Assets (1) / (2)	(5) Projected Annual Covered Payroll	(6) UAAL as a % of Covered Payroll (3) / (5)
Noncontributory Retirement System	1/1/2013	\$ 16,969,392	22,200,896	5,231,504	76.4%	\$ 3,794,929	137.9%
	1/1/2014	18,601,513	22,981,585	4,380,072	80.9	3,705,771	118.2
	1/1/2015	20,240,645	23,868,225	3,627,580	84.8	3,570,912	101.6
	1/1/2016	21,528,737	25,476,579	3,947,842	84.5	3,458,286	114.2
	1/1/2017	22,908,184	27,078,436	4,170,252	84.6	3,406,567	122.4
	1/1/2018	24,430,088	28,119,177	3,689,089	86.9	3,337,061	110.5
	1/1/2019	25,410,465	29,342,665	3,932,200	86.6	3,260,398	120.6
	1/1/2020	26,670,524	30,750,997	4,080,473	86.7	3,240,185	125.9
	1/1/2021	28,661,143	32,522,340	3,861,197	88.1	3,306,382	116.8
	1/1/2022	31,365,272	33,895,549	2,530,277	92.5	3,293,698	76.8
	12/31/2022	33,137,998	34,931,362	1,793,364	94.9	3,361,940	53.3
Contributory Retirement System	1/1/2013	\$ 1,133,433	1,280,836	147,403	88.5%	\$ 103,074	143.0%
	1/1/2014	1,165,002	1,285,851	120,849	90.6	98,023	123.3
	1/1/2015	1,198,862	1,295,581	96,719	92.5	90,623	106.7
	1/1/2016	1,209,069	1,282,510	73,441	94.3	82,426	89.1
	1/1/2017	1,227,072	1,292,854	65,782	94.9	53,615	122.7
	1/1/2018	1,228,311	1,282,052	53,741	95.8	45,177	119.0
	1/1/2019	1,222,340	1,272,024	49,684	96.1	33,750	147.2
	1/1/2020	1,230,688	1,275,564	44,876	96.5	30,241	148.4
	1/1/2021	1,227,721	1,263,644	35,923	97.2	30,748	116.8
	1/1/2022	1,227,034	1,249,193	22,159	98.2	22,481	98.6
	12/31/2022	1,228,083	1,238,805	10,722	99.1	26,782	40.0
Public Safety Retirement System	1/1/2013	\$ 2,283,911	3,093,227	809,316	73.8%	\$ 366,471	220.8%
	1/1/2014	2,530,709	3,191,506	660,797	79.3	365,998	180.5
	1/1/2015	2,781,314	3,344,059	562,745	83.2	360,750	156.0
	1/1/2016	2,988,371	3,622,965	634,594	82.5	355,172	178.7
	1/1/2017	3,217,221	3,908,793	691,572	82.3	352,408	196.2
	1/1/2018	3,462,919	4,086,551	623,632	84.7	350,782	177.8
	1/1/2019	3,635,825	4,290,311	654,486	84.7	332,724	196.7
	1/1/2020	3,847,316	4,522,407	675,091	85.1	332,001	203.3
	1/1/2021	4,155,872	4,761,884	606,012	87.3	338,919	178.8
	1/1/2022	4,558,654	4,950,519	391,865	92.1	307,679	127.4
	12/31/2022	4,849,551	5,115,440	265,889	94.8	325,616	81.7

See accompanying notes to required supplementary information.

Schedules of Funding Progress *(Continued)**(dollars in thousands)*

System	Date	Based on Actuarial Value of Assets					
		(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Unfunded AAL (UAAL) Actuarial Value of Assets (2) - (1)	(4) Funded Ratios Based on Actuarial Value of Assets (1) / (2)	(5) Projected Annual Covered Payroll	(6) UAAL as a % of Covered Payroll (3) / (5)
Firefighters Retirement System	1/1/2013	\$ 824,060	944,791	120,731	87.2%	\$ 110,608	109.2%
	1/1/2014	903,627	963,574	59,947	93.8	110,741	54.1
	1/1/2015	988,806	1,006,646	17,840	98.2	111,305	16.0
	1/1/2016	1,060,312	1,076,963	16,651	98.5	111,133	15.0
	1/1/2017	1,130,198	1,152,602	22,404	98.1	112,322	19.9
	1/1/2018	1,195,358	1,206,602	11,244	99.1	112,953	10.0
	1/1/2019	1,244,696	1,260,882	16,186	98.7	110,823	14.6
	1/1/2020	1,343,400	1,330,808	(12,592)	100.9	112,075	(11.2)
	1/1/2021	1,457,692	1,411,793	(45,899)	103.3	114,458	(40.1)
	1/1/2022	1,607,378	1,475,130	(132,248)	109.0	112,444	(117.6)
	12/31/2022	1,714,351	1,533,404	(180,947)	111.8	114,635	(157.8)
Judges Retirement System	1/1/2013	\$ 131,217	174,923	43,706	75.0%	\$ 14,885	293.6%
	1/1/2014	145,121	185,113	39,992	78.4	15,195	263.2
	1/1/2015	156,956	192,445	35,489	81.6	16,072	220.8
	1/1/2016	166,298	203,540	37,242	81.7	15,832	235.2
	1/1/2017	177,782	223,971	46,189	79.4	16,755	275.7
	1/1/2018	192,037	238,433	46,396	80.5	18,661	248.6
	1/1/2019	201,325	251,328	50,003	80.1	19,288	259.2
	1/1/2020	212,550	262,996	50,446	80.8	19,757	255.3
	1/1/2021	229,290	276,577	47,287	82.9	20,071	235.2
	1/1/2022	251,721	289,092	37,371	87.1	20,869	179.1
	12/31/2022	266,574	297,575	31,001	89.6	20,801	149.0
Governors and Legislators Retirement Plan	1/1/2013	\$ 9,077	11,925	2,848	76.1%	\$ 910	313.0%
	1/1/2014	9,457	12,186	2,729	77.6	390	699.7
	1/1/2015	9,908	12,223	2,315	81.1	928	249.5
	1/1/2016	10,173	12,684	2,511	80.2	943	266.3
	1/1/2017	10,470	13,144	2,674	79.7	799	334.7
	1/1/2018	10,856	13,249	2,393	81.9	722	331.4
	1/1/2019	10,852	13,174	2,322	82.4	639	363.4
	1/1/2020	10,926	13,410	2,484	81.5	757	328.1
	1/1/2021	11,287	13,357	2,070	85.0	757	273.4
	1/1/2022	11,915	13,295	1,380	89.6	564	244.7
	12/31/2022	12,255	13,166	911	93.1	719	126.7

See accompanying notes to required supplementary information.

Schedules of Funding Progress *(Concluded)**(dollars in thousands)*

System	Date	Based on Actuarial Value of Assets					
		(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Unfunded AAL (UAAL) Actuarial Value of Assets (2) - (1)	(4) Funded Ratios Based on Actuarial Value of Assets (1) / (2)	(5) Projected Annual Covered Payroll	(6) UAAL as a % of Covered Payroll (3) / (5)
Tier 2 Public Employees Contributory Retirement System	1/1/2013	\$ 17,818	16,755	(1,063)	106.3%	\$ 203,779	(0.5)%
	1/1/2014	46,241	42,328	(3,913)	109.2	353,227	(1.1)
	1/1/2015	88,743	81,624	(7,119)	108.7	492,882	(1.4)
	1/1/2016	145,518	145,871	353	99.8	637,560	0.1
	1/1/2017	219,885	231,205	11,320	95.1	822,196	1.4
	1/1/2018	318,754	336,419	17,665	94.7	996,965	1.8
	1/1/2019	438,366	473,597	35,231	92.6	1,171,543	3.0
	1/1/2020	594,273	649,960	55,687	91.4	1,380,488	4.0
	1/1/2021	790,633	875,856	85,223	90.3	1,609,102	5.3
	1/1/2022	1,049,866	1,130,355	80,489	92.9	1,969,408	4.1
12/31/2022	1,347,781	1,412,220	64,439	95.4	1,810,502	3.6	
Tier 2 Public Safety and Firefighter Contributory Retirement System	1/1/2013	\$ 1,161	1,042	(119)	111.4%	\$ 10,237	(1.2)%
	1/1/2014	3,822	3,269	(553)	116.9	20,215	(2.7)
	1/1/2015	8,666	7,432	(1,234)	116.6	35,019	(3.5)
	1/1/2016	15,618	14,774	(844)	105.7	53,276	(1.6)
	1/1/2017	25,388	25,809	421	98.4	74,834	0.6
	1/1/2018	38,872	39,603	731	98.2	98,113	0.7
	1/1/2019	56,073	60,934	4,861	92.0	145,332	3.3
	1/1/2020	79,067	92,397	13,330	85.6	175,713	7.6
	1/1/2021	114,579	131,383	16,804	87.2	188,667	8.9
	1/1/2022	167,246	175,585	8,339	95.3	250,128	3.3
12/31/2022	232,138	231,743	(395)	100.2	223,892	(0.2)	
All Retirement Systems	1/1/2013	\$ 21,370,069	27,724,395	6,354,326	77.1%	\$ 4,604,893	138.0%
	1/1/2014	23,405,492	28,665,412	5,259,920	81.7	4,669,560	112.6
	1/1/2015	25,473,901	29,808,235	4,334,334	85.5	4,678,491	92.6
	1/1/2016	27,124,096	31,835,886	4,711,790	85.2	4,714,628	99.9
	1/1/2017	28,916,200	33,926,814	5,010,614	85.2	4,839,496	103.5
	1/1/2018	30,877,196	35,322,086	4,444,890	87.4	4,960,434	89.6
	1/1/2019	32,219,942	36,964,915	4,744,973	87.2	5,170,255	91.8
	1/1/2020	33,988,744	38,898,539	4,909,795	87.4	5,404,174	90.9
	1/1/2021	36,648,217	41,256,834	4,608,617	88.8	5,609,104	82.2
	1/1/2022	40,239,086	43,178,718	2,939,632	93.2	5,977,271	49.2
12/31/2022	42,788,731	44,773,715	1,984,984	95.6	5,884,887	33.7	

See accompanying notes to required supplementary information.

Solvency Tests

System	Date	Actuarial Accrued Liabilities					Portion of Actuarial Accrued Liabilities Covered by Assets			
		(1) Active Members Contributions	(2) Retired and Beneficiaries	(3) Active Member (Employer Financed Portion)	(4) Total Actuarial Accrued Liabilities	Actuarial Value of Assets	(1)	(2)	(3)	(4)
Noncontributory Retirement System	1/1/14	\$ 455,136	10,798,876	11,727,573	22,981,585	18,601,513	100%	100%	63%	81%
	1/1/15	411,752	11,446,753	12,009,720	23,868,225	20,240,645	100	100	70	85
	1/1/16	383,017	12,405,935	12,687,627	25,476,579	21,528,737	100	100	69	85
	1/1/17	331,097	13,201,269	13,546,070	27,078,436	22,908,184	100	100	69	85
	1/1/18	292,923	13,900,793	13,925,461	28,119,177	24,430,088	100	100	74	87
	1/1/19	266,074	15,190,793	13,885,798	29,342,665	25,410,465	100	100	72	87
	1/1/20	225,507	16,348,197	14,177,294	30,750,998	26,670,522	100	100	71	87
	1/1/21	190,185	17,243,829	15,088,326	32,522,340	28,661,143	100	100	74	88
	1/1/22	166,194	18,140,716	15,588,639	33,895,549	31,365,270	100	100	84	93
	12/31/22	142,396	19,120,724	11,088,696	30,351,815	33,137,997	100	100	100	109
Contributory Retirement System	1/1/14	\$ 286,020	717,842	281,989	1,285,851	1,165,002	100%	100%	57%	91%
	1/1/15	272,720	766,078	256,783	1,295,581	1,198,862	100	100	62	93
	1/1/16	236,592	838,922	206,996	1,282,510	1,209,069	100	100	65	94
	1/1/17	206,024	898,668	188,162	1,292,854	1,227,072	100	100	65	95
	1/1/18	188,260	928,948	164,844	1,282,052	1,228,311	100	100	67	96
	1/1/19	173,556	955,061	143,407	1,272,024	1,222,340	100	100	65	96
	1/1/20	154,287	990,382	130,895	1,275,564	1,230,688	100	100	66	96
	1/1/21	138,081	1,008,688	116,875	1,263,644	1,227,721	100	100	69	97
	1/1/22	124,830	1,025,807	98,556	1,249,193	1,227,034	100	100	78	98
	12/31/22	109,532	1,050,880	109,699	1,270,111	1,228,082	100	100	62	97
Public Safety Retirement System	1/1/2014	\$ 74,012	1,682,390	1,435,104	3,191,506	2,530,709	100%	100%	54%	79%
	1/1/2015	70,992	1,769,909	1,503,158	3,344,059	2,781,314	100	100	63	83
	1/1/2016	66,232	1,937,777	1,618,956	3,622,965	2,988,371	100	100	61	82
	1/1/2017	61,343	2,093,058	1,754,392	3,908,793	3,217,221	100	100	61	82
	1/1/2018	59,056	2,202,058	1,636,935	3,898,049	3,277,704	100	100	62	84
	1/1/2019	54,584	2,394,289	1,841,438	4,290,311	3,635,825	100	100	64	85
	1/1/2020	48,125	2,402,198	1,890,172	4,340,495	3,847,316	100	100	74	89
	1/1/2021	44,731	2,782,721	1,934,432	4,761,884	4,155,872	100	100	69	87
	1/1/2022	42,299	2,986,395	1,921,825	4,950,519	4,558,654	100	100	80	92
	12/31/22	40,005	3,164,997	1,255,413	4,460,415	4,849,550	100	100	100	109

Solvency Tests (Continued)

System	Date	Actuarial Accrued Liabilities				Actuarial Value of Assets	Portion of Actuarial Accrued Liabilities Covered by Assets			
		(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)
		Active Members Contributions	Retired and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities					
Firefighters Retirement System	1/1/14	\$ 141,471	544,643	307,460	993,574	903,627	100%	100%	71%	91%
	1/1/15	152,667	566,583	287,396	1,006,646	988,806	100	100	94	98
	1/1/16	162,377	600,565	314,021	1,076,963	1,060,312	100	100	95	98
	1/1/17	171,328	636,389	344,885	1,152,602	1,130,198	100	100	94	98
	1/1/18	178,991	669,170	358,441	1,206,602	1,195,358	100	100	97	99
	1/1/19	187,393	700,755	372,734	1,260,882	1,244,696	100	100	96	99
	1/1/20	194,693	742,312	393,803	1,330,808	1,343,400	100	100	100	101
	1/1/21	201,743	786,139	423,911	1,411,793	1,457,692	100	100	100	103
	1/1/22	208,093	822,983	444,054	1,475,130	1,607,378	100	100	100	109
	12/31/22	213,944	870,618	232,058	1,316,620	1,714,350	100	100	100	130
Judges Retirement System	1/1/14	\$ 3,567	111,132	70,414	185,113	145,121	100%	100%	43%	78%
	1/1/15	3,374	120,460	68,611	192,445	156,956	100	100	48	82
	1/1/16	2,604	129,958	70,978	203,540	166,298	100	100	48	82
	1/1/17	2,540	136,618	84,813	223,971	177,782	100	100	46	79
	1/1/18	2,524	152,585	83,324	238,433	192,037	100	100	44	81
	1/1/19	1,329	168,711	81,288	251,328	201,325	100	100	38	80
	1/1/20	1,268	172,812	88,916	262,996	212,550	100	100	43	81
	1/1/21	1,247	180,903	94,427	276,577	229,290	100	100	50	83
	1/1/22	963	197,187	90,942	289,092	251,721	100	100	59	87
	12/31/22	1,028	201,241	56,912	259,181	266,574	100	100	100	103
Utah Governors and Legislators Retirement Plan	1/1/14	\$ 94	7,037	5,055	12,186	9,457	100%	100%	46%	78%
	1/1/15	62	7,201	4,960	12,223	9,908	100	100	37	81
	1/1/16	66	7,619	4,999	12,684	10,173	100	100	50	80
	1/1/17	46	8,254	4,844	13,144	10,470	100	100	45	80
	1/1/18	27	8,537	4,685	13,249	10,856	100	100	49	82
	1/1/19	27	8,517	4,630	13,174	10,852	100	100	50	82
	1/1/20	32	8,884	4,494	13,410	10,926	100	100	45	81
	1/1/21	24	8,985	4,348	13,357	11,287	100	100	52	85
	1/1/22	25	9,237	4,033	13,295	11,915	100	100	66	90
	12/31/22	27	9,014	4,011	13,053	12,254	100	100	80	94

Solvency Tests *(Concluded)*

System	Date	Actuarial Accrued Liabilities				Actuarial Value of Assets	Portion of Actuarial Accrued Liabilities Covered by Assets			
		(1) Active Members Contributions	(2) Retired and Beneficiaries	(3) Active Member (Employer Financed Portion)	(4) Total Actuarial Accrued Liabilities		(1)	(2)	(3)	(4)
Tier 2 Public Employees Contributory Retirement System	1/1/14	\$ —	—	42,328	42,328	46,241	100%	100%	109%	109%
	1/1/15	—	—	81,624	81,624	88,743	100	100	109	109
	1/1/16	—	12	145,859	145,871	145,518	100	100	100	100
	1/1/17	—	181	231,024	231,205	219,885	100	100	95	95
	1/1/18	—	651	335,768	336,419	318,755	100	100	95	95
	1/1/19	—	2,065	471,532	473,597	438,366	100	100	93	93
	1/1/20	—	3,914	646,046	649,960	594,273	100	100	91	91
	1/1/21	—	7,393	868,463	875,856	790,633	100	100	90	90
	1/1/22	—	11,566	1,118,789	1,130,355	1,049,866	100	100	93	93
	12/31/22	225	22,252	611,596	634,074	1,347,780	100	100	100	213
Tier 2 Public Safety and Firefighter Contributory Retirement System	1/1/14	\$ —	—	3,269	3,269	3,822	100%	100%	100%	117%
	1/1/15	—	—	7,432	7,432	8,666	100	100	100	117
	1/1/16	—	—	14,774	14,774	15,618	100	100	100	106
	1/1/17	—	—	25,809	25,809	25,388	100	100	98	98
	1/1/18	—	—	39,603	39,603	38,872	100	100	98	98
	1/1/19	56	—	60,878	60,934	56,073	100	100	92	92
	1/1/20	57	238	92,102	92,397	79,067	100	100	86	86
	1/1/21	2,280	388	128,715	131,383	114,579	100	100	87	87
	1/1/22	8,107	664	166,814	175,585	167,246	100	100	95	95
	12/31/22	16,207	707	73,873	90,787	232,137	100	100	100	256

Schedules of Active Member Valuation Data

Year Ended December 31

System	Year	Number of Participating Employers	Active Members	Active Members			Inflation Increase (CPI)
				Projected Annual Payroll	Average Pay	Percent Increase	
Noncontributory Retirement System	2013	439	76,845	\$ 3,675,331,000	46,294	3.27%	1.50%
	2014	437	71,827	3,570,912,000	47,994	3.67	1.60
	2015	451	68,273	3,458,286,000	50,002	4.18	0.10
	2016	453	63,214	3,406,567,000	51,984	3.96	1.30
	2017	457	59,578	3,375,321,000	54,845	5.50	2.10
	2018	463	56,299	3,330,548,000	57,971	5.70	1.90
	2019	469	53,134	3,328,313,273	61,056	5.32	2.30
	2020	469	51,161	3,306,382,726	64,446	5.55	1.45
	2021	473	48,179	3,361,939,442	68,517	6.32	7.81
	2022	473	45,437	3,360,197,427	73,277	6.95	6.25
Contributory Retirement System	2013	159	1,733	\$ 94,895,000	51,680	2.33%	1.50%
	2014	159	1,503	90,623,000	54,003	4.49	1.60
	2015	158	943	82,426,000	56,747	5.08	0.10
	2016	158	738	53,615,000	60,936	7.38	1.30
	2017	158	621	45,178,000	62,264	2.18	2.10
	2018	158	519	39,279,000	64,824	4.11	1.90
	2019	158	450	34,317,406	67,202	3.67	2.30
	2020	158	379	30,748,203	69,493	3.41	1.45
	2021	158	314	26,782,041	71,689	3.16	7.81
	2022	158	253	22,860,171	73,706	2.81	6.25
Public Safety Retirement System	2013	130	7,019	\$ 363,389,000	49,825	2.91%	1.50%
	2014	131	6,672	360,751,000	51,603	3.57	1.60
	2015	131	6,399	355,172,000	53,488	3.65	0.10
	2016	132	6,032	352,408,000	57,381	7.28	1.30
	2017	133	5,704	350,783,000	59,841	4.29	2.10
	2018	134	5,305	348,476,000	62,721	4.81	1.90
	2019	134	4,982	339,705,097	66,640	6.25	2.30
	2020	134	4,596	338,919,654	69,418	4.17	1.45
	2021	134	4,166	325,617,001	73,917	6.48	7.81
	2022	134	3,918	313,938,908	85,018	15.02	6.25
Firefighters Retirement System	2013	58	1,845	\$ 112,158,000	58,193	2.98%	1.50%
	2014	59	1,787	111,305,000	60,081	3.24	1.60
	2015	60	1,735	111,133,000	62,628	4.24	0.10
	2016	62	1,663	112,322,000	67,114	7.16	1.30
	2017	62	1,602	112,954,000	69,242	3.17	2.10
	2018	62	1,540	113,587,000	71,914	3.86	1.90
	2019	63	1,490	113,329,452	75,218	4.59	2.30
	2020	63	1,427	114,457,761	78,711	4.64	1.45
	2021	63	1,358	114,635,079	82,854	5.26	7.81
	2022	63	1,289	114,701,606	89,157	7.61	6.25

Schedules of Active Member Valuation Data (Concluded)

Year Ended December 31

System	Year	Number of Participating Employers	Active Members	Active Members			
				Projected Annual Payroll	Average Pay	Percent Increase	Inflation Increase (CPI)
Judges Retirement System	2013	1	112	\$ 14,942,000	139,135	4.89%	1.50%
	2014	1	114	15,195,000	136,234	(2.09)	1.60
	2015	1	112	15,832,000	145,112	6.52	0.10
	2016	1	115	16,755,000	155,852	7.40	1.30
	2017	1	114	18,661,000	162,345	4.17	2.10
	2018	1	116	18,802,000	166,280	2.42	1.90
	2019	1	116	19,595,556	170,318	2.43	2.30
	2020	1	119	20,071,272	172,055	1.02	1.45
	2021	1	119	20,800,716	175,371	1.93	7.81
	2022	1	119	21,201,500	183,837	4.83	6.25
Utah Governors and Legislators Retirement Plan	2013	1	99	\$ 975,000	10,172	26.31%	1.50%
	2014	1	105	1,032,000	9,526	(6.35)	1.60
	2015	1	93	943,000	10,099	6.02	0.10
	2016	1	61	799,000	12,285	21.64	1.30
	2017	1	52	722,000	12,285	—	2.10
	2018	1	52	639,000	12,285	0.00	1.90
	2019	1	47	638,820	12,285	0.00	2.30
	2020	1	41	757,311	12,285	0.00	1.45
	2021	1	44	719,376	12,285	0.00	7.81
	2022	1	44	563,760	12,285	0.00	6.25
Tier 2 Public Employees Contributory Retirement System	2013	461	13,718	\$ 349,257,000	30,279	12.02%	1.50%
	2014	463	17,225	353,227,000	32,388	6.97	1.60
	2015	465	21,778	637,560,000	34,031	5.07	0.10
	2016	466	24,372	822,196,000	30,809	(9.47)	1.30
	2017	470	27,152	996,965,000	39,229	27.33	2.10
	2018	476	30,291	1,171,543,000	41,840	6.66	1.90
	2019	481	33,686	1,380,488,281	44,337	5.97	2.30
	2020	481	35,895	1,609,101,826	47,050	6.12	1.45
	2021	485	39,175	1,810,501,865	50,310	6.93	7.81
	2022	485	43,105	2,099,222,807	53,881	7.10	6.25
Tier 2 Public Safety and Firefighter Contributory Retirement System	2013	145	885	\$ 24,656,000	33,902	1.52%	1.50%
	2014	149	1,331	35,019,000	35,871	5.81	1.60
	2015	149	1,824	53,276,000	37,051	3.29	0.10
	2016	150	2,240	74,834,000	35,363	(4.56)	1.30
	2017	151	2,699	98,113,000	41,946	18.62	2.10
	2018	151	3,301	123,439,000	44,030	4.97	1.90
	2019	152	3,767	156,778,405	46,645	5.94	2.30
	2020	152	4,301	188,667,334	48,773	4.56	1.45
	2021	152	4,799	223,892,253	52,173	6.97	7.81
	2022	152	5,326	265,137,065	60,344	15.66	6.25

Schedules of Retirants and Beneficiaries

Year Ended December 31

System	Year	Added to Rolls		Removed from Rolls		Rolls End of Year		% Increase in Annual Allowances	Average Annual Allowances
		Number	Allowances	Number	Allowances	Number	Allowances		
Noncontributory Retirement System	2013	3,366	\$118,337,000	715	\$ 43,781,000	43,107	\$ 974,684,000	8.28%	\$ 21,063
	2014	3,680	123,894,000	866	54,780,000	45,921	1,043,798,000	7.09	21,170
	2015	3,399	140,471,000	578	60,622,000	48,742	1,123,647,000	7.65	21,363
	2016	3,965	141,910,000	1,352	81,240,000	51,355	1,184,317,000	5.40	22,475
	2017	3,340	148,952,000	797	85,232,000	53,898	1,248,037,000	5.38	22,576
	2018	3,445	149,257,000	939	77,080,000	56,404	1,320,214,000	5.78	22,921
	2019	3,237	140,086,000	992	63,317,000	58,649	1,396,983,000	5.81	23,392
	2020	3,491	170,934,000	1,114	79,290,000	61,026	1,488,627,000	6.56	23,902
	2021	3,205	154,197,000	1,117	77,778,000	63,114	1,565,046,000	5.13	24,219
	2022	3,287	168,469,000	1,135	70,875,000	65,266	1,662,640,000	6.24	25,102
Contributory Retirement System	2013	222	\$ 9,875,000	340	\$ 6,567,000	4,252	\$ 74,158,000	4.67%	\$ 15,996
	2014	209	10,036,000	146	7,179,000	4,315	77,015,000	3.85	16,341
	2015	187	11,793,000	280	7,418,000	4,222	81,390,000	5.68	17,497
	2016	227	10,463,000	284	8,406,000	4,165	83,447,000	2.53	19,284
	2017	123	8,205,000	246	6,891,000	4,042	84,761,000	1.57	19,831
	2018	110	7,241,000	235	5,207,000	3,917	86,795,000	2.40	21,028
	2019	81	5,429,000	208	4,062,000	3,790	88,162,000	1.57	22,332
	2020	80	4,435,000	191	2,707,000	3,679	89,890,000	1.96	23,401
	2021	72	4,760,000	169	2,938,000	3,582	91,712,000	2.03	24,393
	2022	66	5,381,000	154	2,728,000	3,494	94,365,000	2.89	25,970
Public Safety Retirement System	2013	230	\$ 15,532,000	41	\$ 6,585,000	4,481	\$ 137,486,000	6.96%	\$ 28,233
	2014	562	15,463,000	135	8,185,000	4,908	144,764,000	5.29	27,226
	2015	268	18,681,000	12	8,058,000	5,164	155,387,000	7.34	27,550
	2016	368	18,523,000	120	9,402,000	5,412	164,508,000	5.87	29,241
	2017	266	16,937,000	40	8,575,000	5,638	172,870,000	5.08	29,504
	2018	372	26,373,000	43	10,829,000	5,967	188,414,000	8.99	30,193
	2019	325	24,410,000	39	10,901,000	6,253	201,923,000	7.17	30,975
	2020	331	25,411,000	33	12,045,000	6,551	215,289,000	6.62	31,477
	2021	388	28,699,000	41	10,316,000	6,898	233,672,000	8.54	31,874
	2022	273	21,238,000	25	13,134,000	7,146	241,776,000	3.47	32,817
Firefighters Retirement System	2013	46	\$ 4,552,000	20	\$ 3,480,000	1,230	\$ 44,747,000	2.45%	\$ 33,292
	2014	119	4,664,000	51	1,701,000	1,298	47,710,000	6.62	32,763
	2015	55	4,788,000	20	2,827,000	1,333	49,671,000	4.11	33,319
	2016	72	4,715,000	33	2,284,000	1,372	52,102,000	4.89	36,574
	2017	62	5,126,000	11	2,435,000	1,423	54,793,000	5.16	37,191
	2018	61	5,365,000	20	2,718,000	1,464	57,440,000	4.83	37,777
	2019	58	5,600,000	23	3,193,000	1,499	59,847,000	4.19	38,915
	2020	61	5,709,000	17	2,714,000	1,543	62,842,000	5.00	39,681
	2021	58	4,919,000	5	1,253,000	1,596	66,508,000	5.83	40,084
	2022	60	6,500,000	5	1,989,000	1,651	71,019,000	6.78	41,521

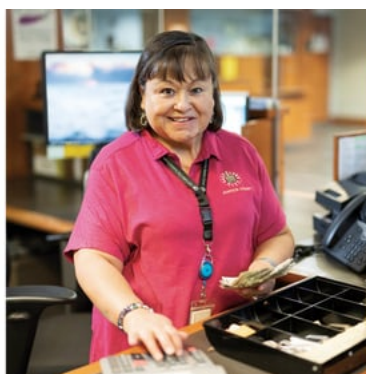
Schedules of Retirants and Beneficiaries (Concluded)

Year Ended December 31

System	Year	Added to Rolls		Removed from Rolls		Rolls End of Year		% Increase in Annual Allowances	Average Annual Allowances
		Number	Allowances	Number	Allowances	Number	Allowances		
Judges Retirement System	2013	11	\$ 1,898,000	4	\$ 844,000	124	\$ 10,189,000	11.54%	\$ 76,264
	2014	14	1,840,000	6	668,000	132	11,361,000	11.50	79,202
	2015	9	1,711,000	1	672,000	140	12,400,000	9.15	81,633
	2016	7	637,000	6	707,000	141	12,330,000	(0.56)	84,793
	2017	10	2,315,000	3	1,024,000	148	13,621,000	10.47	87,512
	2018	10	2,560,000	3	70,000	155	16,111,000	18.28	92,753
	2019	3	760,000	5	1,525,000	153	15,346,000	(4.75)	96,164
	2020	5	1,217,000	3	700,000	155	15,863,000	3.37	99,180
	2021	13	2,823,000	7	86,000	161	18,600,000	17.25	102,152
	2022	4	1,112,000	1	2,103,000	164	17,609,000	(5.33)	105,684
Utah Governors and Legislators Retirement Plan	2013	21	\$ 119,000	6	\$ 41,000	239	\$ 892,000	9.58%	\$ 3,167
	2014	9	80,000	12	63,000	236	909,000	1.91	3,287
	2015	12	73,000	7	78,000	241	904,000	(0.55)	3,311
	2016	17	128,000	14	91,000	244	941,000	4.09	3,863
	2017	11	87,000	2	55,000	253	973,000	3.40	3,883
	2018	7	57,000	10	52,000	250	978,000	0.51	3,860
	2019	10	77,000	12	43,000	248	1,012,000	3.48	3,993
	2020	10	70,000	9	59,000	249	1,023,000	1.09	3,969
	2021	7	97,000	12	84,000	244	1,036,000	1.27	4,141
	2022	3	24,000	10	50,000	237	1,010,000	(2.51)	4,199
Tier 2 Public Employees Contributory Retirement System	2013	—	—	—	—	—	—	—	—
	2014	—	—	—	—	—	—	—	—
	2015	1	\$ 401,000	—	\$ 68,000	1	\$ 333,000	—	\$ 865
	2016	8	26,000	—	43,000	9	316,000	(5.11)%	1,565
	2017	17	72,000	—	(29,000)	26	417,000	31.96	1,932
	2018	38	219,000	—	(56,000)	64	692,000	65.95	2,505
	2019	47	271,000	(2)	(2,000)	113	965,000	39.45	2,664
	2020	71	417,000	(9)	(15,000)	193	1,397,000	44.77	2,917
	2021	78	595,000	(5)	10,000	276	1,982,000	41.88	3,207
	2022	160	1,609,000	(21)	989,000	457	2,602,000	31.28	4,008
Tier 2 Public Safety and Firefighter Contributory Retirement System	2013	—	—	—	—	—	—	—	—
	2014	—	—	—	—	—	—	—	—
	2015	—	\$ 30,000	—	—	—	\$ 30,000	—	—
	2016	—	—	—	\$ 2,000	—	28,000	(6.67)%	—
	2017	—	—	—	(33,000)	—	61,000	117.86	—
	2018	—	—	—	61,000	—	—	(100.00)	—
	2019	1	25,000	—	(65,000)	1	90,000	—	\$ 12,494
	2020	3	41,000	—	55,000	4	76,000	(15.56)	8,360
	2021	1	10,000	—	49,000	5	37,000	(51.32)	7,744
	2022	—	—	(2)	(5,000)	7	42,000	13.51	6,054

Defined Benefit Systems Summary of Plan Provisions

As of January 1, 2022



Noncontributory Retirement System

Membership Eligibility

The Public Employees Noncontributory Retirement System was established on July 1, 1986. All eligible employees of the State and School entities hired subsequent to that date are automatically members of the Noncontributory System. Local government entities had the option of adopting the new System or remaining with the Contributory System.

An employee is qualified for membership in the Noncontributory System if his or her employer participates in the System and the employee initially began full-time employment prior to July 1, 2011, and works at least 20 hours per week and receives benefits normally provided by his or her employer as approved by the Retirement Board, and teachers who teach half-time.

Vesting

Retirement benefit becomes vested upon the member's completion of four years of qualifying service.

Service Retirement

Age	Years of Service	Allowance Reduction+
Any age	30	None
Any age	25	Full actuarial before age 65
60	20	3% each year before age 65
62	10	3% each year before age 65
65	4	None

†With fewer than 30 years of service from any combination of Utah Retirement Systems, retiring before age 65 will reduce the monthly benefit approximately 7% for every year under age 60 and 3% for each year between ages 60 and 65.

Service Benefit Formula

Number of years of service x 2.0% x FAS.*

**FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.*

Defined Benefit Systems
Summary of Plan Provisions (Continued)

Cost-of-Living Allowance

Up to 4% annually on the original retirement benefit. Eligible after one year.

Death Benefits

An active member’s death benefit consists of a payment equal to 75% of the highest annual salary with a minimum of \$1,000 and a refund of transferred contributions plus interest, if applicable. The spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications or has 15 or more years of service credit.

An inactive member’s death benefit for someone with fewer than 10 years of service consists of a refund of transferred contributions plus interest, if applicable. For those with 10 or more years of service credited to their account prior to July 1, 1987, and who have not withdrawn their contributions, the benefit is the same as for active members.

A retired member’s death benefit depends on the retirement option selected at retirement. No death benefit is available without a reduced retirement benefit.

Refunds

A terminated member who transferred from the Contributory Retirement System is eligible for a 100% refund of transferred member contributions plus interest. There is a 60-day refund processing period after the last day of paid employment.

Redeposits

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

Contribution Rates (as of 12/31/2022)

Employer rate for State and School (Level A) is 22.19% of covered salary and 17.97% for Local Government (Level B).

Interest

Up to 6.85% on member accounts transferred from the Contributory Retirement System.

Contributory Retirement System

Membership Eligibility

The Public Employees Contributory Retirement System includes eligible public employees of the State of Utah and its political subdivisions including public education employees of those entities covered by the System.

An employee is qualified for membership in the Contributory System if his or her employer participates in the System and the employee initially began full-time employment prior to July 1, 2011, and works at least 20 hours per week and receives benefits normally provided by his or her employer as approved by the Retirement Board, and teachers who teach half-time.

Vesting

Retirement benefit becomes vested upon the member’s completion of four years of qualifying service. Eligible member contributions and interest thereon vest immediately.

Service Retirement

Age	Years of Service	Allowance Reduction†
Any age	30	None
60	20	3% each year before age 65
62	10	3% each year before age 65
65	4	None

†With fewer than 30 years of service from any combination of Utah Retirement Systems, retiring before age 65 will reduce the monthly benefit approximately 3% for each year between ages 60 and 65.

Service Benefit Formula

- 1) Number of years of service before 7-1-75 x 1.25% x FAS.*
- 2) Number of years of service after 6-30-75 x 2.0% FAS.*
- 3) Plan 1 allowance = total of 1 and 2

*FAS (Final Average Salary) = highest five years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.

Cost-of-Living Allowance

Up to 4% annually on the original retirement benefit. Eligible after one year.

Defined Benefit Systems

Summary of Plan Provisions *(Continued)*

Death Benefits

An active member’s death benefit consists of a payment equal to 75% of the highest annual salary with a minimum of \$1,000 and a refund of contributions plus interest, if applicable. The spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications, or has 25 years of service.

An inactive member’s death benefit for someone with fewer than 10 years of service consists of a refund of contributions plus interest, if applicable. For those with 10 or more years of service credited to their account prior to July 1, 1987, and who have not withdrawn their contributions, the benefit is the same as for active members.

A retired member’s death benefit depends on the retirement option selected at retirement. No death benefit is available without a reduced retirement benefit.

Refunds

A terminated member is eligible for a 100% refund of member contributions plus interest. There is a 60-day refund processing period after the last day of paid employment.

Redeposits

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

Contribution Rates *(as of 12/31/2022)*

Member contribution rate is 6.00%* of covered salary. Employer rate for State and School (Level A) is 17.70% of covered salary and 13.96% for Local Government (Level B).

**Employers have the option of paying all or part of member contributions on behalf of their employees.*

Interest

Up to 6.85% on member accounts.

Public Safety Retirement System

Membership Eligibility

The Public Safety Retirement System includes eligible State and local government employees directly involved in law enforcement. The Public Safety System consists of the Contributory and Noncontributory divisions.

Employees are qualified for membership in the Public Safety System if the employee initially began employment prior to July 1, 2011, and: (1) they are regularly scheduled to work and be compensated for 2,080 hours a year in a recognized public safety department; (2) they have completed a certified training program; (3) their primary duty is as a peace officer, correctional officer, special function officer, certified dispatcher whose employer elected coverage in the Public Safety System, or full-time member of the Board of Pardons and Parole; and (4) in the course of employment their life or personal safety is at risk.

Vesting

Retirement benefit becomes vested upon the member’s completion of four years of service credit. Eligible member contributions vest immediately.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

Service Benefit Formula

- 1) 2.5% x FAS* x years of service up to 20 years.
- 2) 2.0% x FAS* x years of service over 20 years.
- 3) Monthly benefit = total of 1 and 2.

**FAS (Final Average Salary) = highest three years’ eligible earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.*

Cost-of-Living Allowance

Up to 2.5% annually on original retirement benefit. Specific employers have provided an enhanced cost-of-living (COLA) benefit to their Public Safety retirees that raise the maximum COLA from 2.5 to 4% based on the CPI. Eligible after one year.

Defined Benefit Systems**Summary of Plan Provisions** *(Continued)***Death Benefits****Division A***(with Social Security coverage)***Non-Retired Member (Active)**

If the member dies in the line of duty, the surviving spouse at the time of death, will receive a lump-sum payment equal to six months of the member's final average salary plus a monthly benefit of 30% of the final average monthly salary. If the member's death is not in the line of duty and has fewer than 10 years of public safety service credit, the beneficiary(ies) will receive a \$1,000 lump-sum payment or a refund of member contributions, whichever is greater. If the member has 10 or more years, but less than 20, the surviving spouse will receive a \$500 lump-sum payment, plus a monthly benefit of 2% of the member's final average monthly salary for each year of service, up to 30% of the final average monthly salary. If the member dies and has 20 or more years of public safety service credit, they will be considered retired. The surviving spouse, at the time of death, will receive 65% of the member's monthly benefit.

Division B*(without Social Security coverage)***Non-Retired Member (Active)**

If the member dies in the line of duty, the surviving spouse, at the time of death, will receive a lump-sum payment equal to six months of the member's final average salary, plus a monthly benefit of 37.5% of the final average monthly salary. Each unmarried child under age 18 or dependent unmarried child who is mentally or physically disabled will receive \$50 per month, if the member has two or more years of public safety service credit. Total monthly payments cannot exceed 75% of the final average monthly salary. If the member's death is not in the line of duty and has fewer than two years of public safety service credit, the surviving spouse, at the time of death, will receive a refund of member contributions plus 50% of the last 12 months' salary. If the member has two or more years, the surviving spouse, at the time of death, will receive a lump-sum payment of \$1,500 plus a monthly benefit of 37.5% of the member's final average monthly salary. Each unmarried child under age 18 or dependent unmarried child who is mentally or physically disabled will receive \$50 per month, if the member has two or more years of public safety service credit. Total monthly payments to the beneficiary(ies) cannot exceed 75% of the final average monthly salary.

If the member dies and has 20 or more years of public safety service credit, the surviving spouse at the time of death, will receive 65% of the member's monthly benefit or a monthly benefit of 37.5% of the final average monthly salary, whichever is greater.

Both Divisions**Non-Retired Member (Active)**

If the member dies and leaves no surviving spouse or minor children, the beneficiary(ies) will receive a 100% refund of member contributions or \$500, whichever is greater.

Non-Retired Member (Inactive)

If the member is inactive with less than 20 years of public safety service credit, the surviving spouse, at the time of death, or if the member dies leaving no surviving spouse or minor children, the beneficiary(ies) will receive a refund of member contributions or \$500 whichever is greater. If the member is inactive with 20 or more years of public safety service credit when the member dies, the surviving spouse, at the time of death, will receive a benefit of 50% of the amount payable to the member had they retired on the first of the month, following the month, in which the member's death occurred.

Retired Member

After the member's death, the surviving spouse, at the time of death, will receive a monthly benefit equal to 65% of the member's monthly benefit. If they elected a smaller monthly benefit at the time of retirement, the surviving spouse will receive 75% of the monthly benefit.

Refunds

A terminated member is eligible for a 100% refund of member contributions. There is a 60-day refund processing period after the last day of paid employment.

Redeposits

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

Defined Benefit Systems

Summary of Plan Provisions *(Continued)*

Contribution Rates *(as of 12/31/2022)*

Noncontributory Option

Employer rates for Division A are: State units 41.35%; Bountiful 50.38%; other law enforcement units with a 2.5% COLA 34.04% and units with a 4.0% COLA 35.71% of salary. Employer rates for Division B are: Salt Lake City 46.71%; Ogden 48.72%; Provo 42.23%; Logan 41.97%; other law enforcement units with a 2.5% COLA 32.28% and units with a 4.0% COLA 37.97% of salary.

Contributory Option

Member rates in Division A are: State units 12.29%; all other law enforcement units with a 2.5% COLA 12.29% and units with a 4.0% COLA 12.29% of covered salary. Member rates in Division B are: other law enforcement units with a 2.5% COLA 10.50% and units with a 4.0% COLA 10.50% of salary.*

Employer rates for Division A with a 2.5% COLA are 22.79% and units with a 4.0% COLA are 24.37% of covered salary. Employer rates for Division B are other law enforcement units with a 2.5% COLA 22.81% and units with a 4.0% COLA 27.98% of salary.

**Employers have the option of paying all or part of member contributions on behalf of their employees.*

Interest

Up to 6.85% on member accounts.

Firefighters Retirement System

Membership Eligibility

The Firefighters Retirement System includes eligible State and local government employees directly involved in fire fighting and whose duties are classified as hazardous. If an employer does not classify the duties as hazardous, the employee will be enrolled in either the Public Employees Contributory or Noncontributory Retirement System.

Employees are qualified for membership in the Firefighters System if they initially began employment prior to July 1, 2011, and are regularly scheduled to work and be compensated for 2,080 hours a year in a regular constituted fire department and are regularly assigned to hazardous duty, or are the State Fire Marshall or a Deputy State Fire Marshall. Although volunteer firefighters who are on the rolls of a legally organized volunteer fire department do not contribute to the System and are not eligible for service retirement benefits, they or their beneficiaries are eligible for benefits provided for firefighters enrolled in Division A. Benefits are based on the salary of the lowest paid firefighters in a first-class city if they are disabled or killed in the line of duty.

Vesting

Retirement benefit becomes vested upon the member's completion of four years of service credit. Eligible member contributions vest immediately.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	20	None
60	10	None
65	4	None

Service Benefit Formula

- 1) 2.5% x FAS* x years of service up to 20 years.
- 2) 2.0% x FAS* x years of service over 20 years.
- 3) Monthly benefit = total of 1 and 2.

**FAS (Final Average Salary) = highest three years' earnings converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.*

Defined Benefit Systems

Summary of Plan Provisions *(Continued)*

Cost-of-Living Allowance

Up to 4.0% annually on original retirement benefit.
Eligible after one year.

Disability Benefits

If disability is in the line of duty, the benefit is 50% of the final average salary with no minimum age or service requirements. If disability is not in the line of duty, the benefit is a refund of contributions for members with fewer than five years of service. For members with more than five years of service, the benefit is the same as that for disability incurred in the line of duty. Benefits are suspended while receiving Workers Compensation.

Death Benefits

For surviving spouse benefits, a member must have been married for at least six months prior to death.

Division A

(with Social Security coverage)
Non-Retired Member (Active)

If the member dies in the line of duty and has less than 20 years of firefighter service credit, the surviving spouse at the time of death, will receive a lump-sum payment equal to six months of the member's final average salary plus a monthly benefit of 30% of the final average monthly salary. If the member's death is not in the line of duty and has less than 10 years of firefighter service credit, the beneficiary(ies) will receive a \$1,000 lump-sum payment or a refund of member contributions, whichever is greater. If the member has 10 or more, but less than 20 years of firefighter service credit, the surviving spouse will receive a \$500 lump-sum payment, plus a monthly benefit of 2% of the member's final average monthly salary for each year of service, up to 30% of the final average monthly salary. If the member dies and has 20 or more years of firefighter service credit, they will be considered retired and the surviving spouse, at the time of death, will receive the death benefit payable as a retired member.

Division B

(without Social Security coverage)
Non-Retired Member (Active)

If the member dies in the line of duty and the member has less than 20 years of firefighter service credit, the surviving spouse, at the time of death, will receive a lump-sum payment equal to six months of the member's final average salary, plus a monthly benefit of 37.5% of the final average monthly salary. Each unmarried child under age 21 or dependent unmarried child who is mentally or physically disabled will receive \$75 per month, if the member has five or more years of firefighter service credit.

Total monthly payments to the beneficiary(ies) cannot exceed 75% of the final average monthly salary. If the member's death is in the line of duty and has 20 or more years of firefighter service credit, the member will be considered retired and the surviving spouse at the time of death, will receive the death benefit payable as a retired member. If the member's death is not in the line of duty and has less than five years of firefighter service credit, the surviving spouse, at the time of death, will receive a refund of member contributions plus 50% of the most recent 12 months' salary. If the member has five or more years of firefighter service credit, the surviving spouse, at the time of death, will receive a lump-sum payment of \$1,500 plus a monthly benefit of 37.5% of the member's final average monthly salary. Each unmarried child under age 21 or dependent unmarried child who is mentally or physically disabled will receive \$75 per month, if the member has five or more years of firefighter service credit. Total monthly benefits to the beneficiaries cannot exceed 75% of the final average monthly salary.

Both Divisions

Non-Retired Member (Active)

If the member dies and leaves no surviving spouse or minor children, the beneficiary(ies) will be paid a 100% refund of member contributions or \$500, whichever is greater.

Defined Benefit Systems

Summary of Plan Provisions *(Continued)*

Non-Retired Member (Inactive)

If the member is inactive with less than 20 years of firefighter service credit, the surviving spouse, at the time of death, or if the member dies leaving no surviving spouse or minor children, the beneficiary(ies) will receive a refund of member contributions or \$500 whichever is greater. If the member is inactive with 20 or more years of firefighter service credit when the member dies, the surviving spouse, at the time of death, will receive a benefit of 50% of the amount payable to the member had they retired on the first of the month, following the month, in which the member’s death occurred.

Retired Member

After the member’s death, the spouse, at the time of death, will receive 75% of the member’s monthly benefit.

Refunds

A terminated member is eligible for a 100% refund of member contributions. There is a 60-day refund processing period after the last day of paid employment.

Redeposits

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

Contribution Rates *(as of 12/31/2022)*

Member rate in Division A is 15.05% of covered salary. Member rate in Division B is 16.71% of covered salary.* Employer rate in Division A is 3.61% and in Division B is 6.24% of covered salary. A fire insurance premium tax equal to 11.06% of salaries is also an additional part of the employer contribution rates. Fire insurance premium taxes are collected by the Utah State Treasurer for the Firefighters Retirement System to help fund retirement benefits.

**Employers have the option of paying all or part of member contributions on behalf of their employees.*

Interest

Member contributions receive no interest.

Judges Retirement System

Membership Eligibility

The Judges Retirement System includes justices and judges of the courts of record as authorized in state statutes.

Vesting

Retirement benefit becomes vested upon the member’s completion of 6 years of service credit. Eligible member contributions and interest thereon vest immediately.

Service Retirement

Age	Years of Service	Allowance Reduction
Any age	25	None
55	20	Full actuarial reduction
62	10	None
70	6	None

Service Benefit Formula

- 1) $5.00\% \times \text{FAS}^* \times \text{years of service up to 10 years.}$
- 2) $2.25\% \times \text{FAS}^* \times \text{years of service between 10 and 20 years.}$
- 3) $1.00\% \times \text{FAS}^* \times \text{years of service over 20 years.}$
- 4) Monthly benefit = total of 1, 2, and 3.

**FAS (Final Average Salary) = highest two years’ earnings in judicial service converted to a monthly average. Yearly salary increases are limited to 10% plus a COLA determined by the CPI.*

Cost-of-Living Allowance

Up to 4% compounded annually, beginning one year after retirement.

Death Benefits

For surviving spouse benefits, a member must have been married for at least six months prior to death.

An active or inactive member’s death benefit to the surviving spouse consists of a refund of member contributions and interest plus 65% of the member’s most recent 12 months’ compensation prior to death, or a monthly allowance equal to 65% of the allowance as computed but disregarding early retirement reductions.

Defined Benefit Systems

Summary of Plan Provisions *(Continued)*



A retired member’s death benefit to the surviving spouse is 65% of the member’s monthly benefit at the time of death. If the member elected a reduced monthly benefit, the surviving spouse will receive a death benefit of 75% of the member’s monthly benefit.

Refunds

A terminated member is eligible for a 100% refund of member contributions plus interest. There is a 60-day refund processing period after the last day of paid employment.

Redeposits

A redeposit with interest may be made in monthly installments, by a lump-sum payment, or by direct transfer from a qualified plan. A redeposit must be completed prior to retirement. Service credit is restored when the redeposit is completed.

Contribution Rates *(as of 12/31/2022)*

Employer rate includes 44.76% of covered salary and 7.15% from court fees.

Interest

Up to 6.85% on member accounts.

Utah Governors and Legislators Retirement Plan

Membership Eligibility

The Utah Governors and Legislators Retirement Plan includes only governors and legislators of the State of Utah.

Vesting

Retirement benefit becomes vested upon the member’s completion of four years of service credit.

Service Retirement for Governors

Age	Years of Service	Allowance Reduction
65	1 Term	None
62	10 years	3% each year before age 65

Service Retirement for Legislators

Age	Years of Service	Allowance Reduction
65	4	None
62	10	3% each year before age 65

Service Benefit Formula

Governors: \$500 per month per term increased semi-annually up to 2% based on the CPI. The amount as of 12-31-2022 is \$1,480.

Legislators: \$10 per month per each year of service as a legislator increased semi-annually up to 2% based on the CPI. The amount as of 12-31-2022 is \$32.00.

Defined Benefit Systems

Summary of Plan Provisions *(Continued)*

Cost-of-Living Allowance

Up to 4% annually on the original retirement benefit. Eligible after one year.

An additional \$3.50 per month, for each year of service, is payable to elected and appointed legislators and governors who were members of this Plan before March 1, 2000.

Death Benefits

An active or retired member's death benefit to a surviving spouse consists of a monthly pension equal to 50% of the retirement allowance paid, or to which the member would have been entitled to upon reaching age 65, if the member has four or more years of service as a governor or legislator. The deceased member and surviving spouse must have been married at least six months.

Contribution Rates *(as of 12-31-2022)*

There was a 2021-22 appropriation payable by June 30, 2023, to the Utah Governors and Legislators Retirement Plan of \$359,939.

Tier 2 Public Employees Contributory Retirement System

Membership Eligibility

The Tier 2 Public Employees Contributory Retirement System, brought about by SB 63, became effective on July 1, 2011. All eligible employees beginning employment on or after July 1, 2011, who have no previous service credit with any of the Utah Retirement Systems, are members of the Tier 2 Retirement System.

A person initially entering full-time employment with a participating employer on or after July 1, 2011, must make an election to participate in either the Tier 2 Hybrid Public Employees Retirement System or the Tier 2 Defined Contribution (DC) Plan, within one year of his or her employment date. The election made is irrevocable. If no election is made, the employee automatically becomes a member of the Tier 2 Hybrid Public Employees Retirement System.

An employee is qualified for membership in the Tier 2 Public Employees Retirement System if his or her employer participates in this system, and one of the following: the employment, contemplated to continue during a fiscal or calendar year, normally requires an average of 20 hours or more per week and the employee receives benefits normally provided by the employer as approved by the Retirement Board; the employee is a classified school employee whose employment normally requires an average of 20 hours or more per week regardless of benefits; the employee is a teacher who teaches half-time or more and receives benefits normally provided by the employer as approved by the Retirement Board; the employee is an appointed officer* whose position is full time as certified by the participating employer; the employee is in a probationary status and meets eligibility requirements; the employee performs services through an employee leasing or similar arrangement and meets eligibility requirements.

**Appointed officers are employees appointed to a position for a definite and fixed term of office, and the position is recorded in the employer's charter, creation document, or similar document.*

Defined Benefit Systems**Summary of Plan Provisions** *(Continued)***Vesting**

Retirement benefit is vested upon the member's completion of four years of qualifying service credit.

Service Retirement***Applies only to the Tier 2 Hybrid Retirement System***

Age	Years of Service	Allowance Reduction†
Any age	35	None
60	20	Full actuarial before age 65
62	10	Full actuarial before age 65
65	4	None

†When fewer than 35 years of service from any combination of Utah Retirement Systems, the allowance will be reduced by approximately 7% for each year between ages 60 and 63 and approximately 9% for each year between ages 64 and 65.

Service Benefit Formula***Applies only to the Tier 2 Hybrid Retirement System***

Service benefit formula is based upon number of years of service credit x 1.5% x highest five years' earnings converted to a monthly average.

Cost-of-Living Allowance

The Tier 2 Hybrid Retirement System has a COLA up to 2.5% on the retirement allowance. There is no COLA in the Tier 2 Defined Contribution Plan.

Death Benefits***Death Benefits for Non-Retired Members — Applies only to the Tier 2 Hybrid Public Employees Retirement System***

The surviving spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications or has 15 or more years of service credit. If there are any member contributions in the employee's Tier 2 Hybrid Public Employees Retirement Account and the surviving spouse does not qualify for a career benefit, the beneficiary(ies) will receive a refund of the employee's contributions plus interest.

Death Benefits — Applies to both the Hybrid Public Employees Retirement System and the DC Plan

If an employee is a non-retired member who is employed by a participating employer at the time of his or her death, his or her beneficiary(ies) will receive a payment representing 75% of the employee's highest annual salary. If the employee has less than 12 months of service, the benefit is prorated. The minimum insurance payment is \$1,000.

Death Benefits for Non-Retired Members — in the Tier 2 Retirement Plan

After death, any money vested in the employee's URS Savings Plans (401(k), 457(b), IRAs) is payable to his or her beneficiary(ies).

Refunds

If the employee has a balance in his or her Tier 2 Defined Contribution account, he or she may be able to withdraw funds under certain circumstances. When an employee has four years of eligible employment, the employer contributions in his or her 401(k) account become vested and he or she is able to take a refund of the account upon termination of employment.

If the employee terminates employment prior to the vesting period and subsequently enters employment with a URS participating employer within 10 years of the previous termination date, all employer contributions will be reinstated upon completion of the vesting period. If he or she is not re-employed and eligible to participate in the DC Plan within 10 years of the previous termination date, the funds are forfeited. If the employee makes personal deferrals (i.e., payroll deductions) to the DC Plan, those deferrals are vested immediately and may be taken as a refund when terminating employment.

Contribution Rates * *(as of 12-31-2022)*

Member contribution rate is 0% of covered salary. Rates range from 16.19% to 17.95% of salary for local government employers. The rate for State and School Employers is 20.02%.

*Includes 401(k) portion of the contribution rate.

Defined Benefit Systems

Summary of Plan Provisions *(Continued)*



Tier 2 Public Safety and Firefighter Contributory Retirement System

Membership Eligibility

The Tier 2 Public Safety and Firefighter Contributory Retirement System, brought about by SB 63, became effective on July 1, 2011. All eligible employees beginning employment on or after July 1, 2011, who have no previous credit with any of the Utah Retirement Systems, are members of the Tier 2 Public Safety and Firefighter Retirement System.

A person initially entering full-time employment with a participating employer on or after July 1, 2011, must make an election to participate in either the Tier 2 Public Safety and Firefighter Retirement System or the Tier 2 Defined Contribution (DC) Plan, within one year of his or her employment date. The election made is irrevocable. If no election is made, the employee automatically becomes a member of the Tier 2 Hybrid Public Safety and Firefighter Retirement System.

An employee qualifies for membership if: The employment normally requires an average of 2,080 hours of regularly scheduled employment per year in a recognized public safety department, as a law enforcement officer, correctional officer, special function officer, or full-time member of the Board of Pardons and Parole, and in the course of employment the employee's life or personal safety is at risk, and he or she has completed a certified training program, which is documented with our office,

OR, if the employment normally requires an average of 2,080 hours of regularly scheduled employment per year in a regularly constituted fire department, the employee has been trained in firefighter techniques, and is assigned to a position of hazardous duty.

If the employee doesn't meet the eligibility requirements outlined in the previous explanation, based on the employer's participation, the employee will be enrolled in the Tier 2 Public Employees Contributory Retirement System as long as eligibility requirements are met.

Vesting

Retirement benefit is vested upon the member's completion of four years of qualifying service credit.

Service Retirement

Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

Age	Years of Service	Allowance Reduction†
Any age	25	None
60	20	Full actuarial before age 65
62	10	Full actuarial before age 65
65	4	None

† When fewer than 25 years of service from any combination of Utah Retirement Systems, the allowance will be reduced by approximately 7% for each year between ages 60 and 63 and approximately 9% for each year between ages 64 and 65.

Defined Benefit Systems

Summary of Plan Provisions *(Concluded)*

Service Benefit Formula

Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

- 1) Number of years of service before 7-1-2020 x 1.50% x FAS.*
 - 2) Number of years after 6-30-2020 x 2.0% x FAS.*
- Plan 1 allowance = total of 1 and 2.

*FAS (*Final Average Salary*) = highest five years' earnings converted to a monthly average.

Cost-of-Living Allowance

The Tier 2 Hybrid Public Safety and Firefighter Retirement System has a COLA up to 2.5% on the retirement allowance. There is no COLA in the Tier 2 Defined Contribution Plan.

Death Benefits

Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

The surviving spouse of a deceased member is eligible for a monthly benefit if they have been married for at least six months and the member meets age and service qualifications or has 15 or more years of service credit. If there are any member contributions in the employee's Tier 2 Hybrid Public Employees Retirement Account and the surviving spouse does not qualify for a career benefit, the beneficiary(ies) will receive a refund of the employee's contributions plus interest.

Line-of-Duty Death — Applies only to the Tier 2 Hybrid Public Safety and Firefighter Retirement System

If a member accrued less than 20 years of public safety or firefighter service credit, his or her surviving spouse at the time of death will receive a lump-sum payment equal to six months of the final average salary and the greater of an allowance equal to 30% of the members final average salary or an allowance equal to 2% of the members final average salary multiplied by the years of service credit accrued by the member.

If a member accrued 20 or more years of public safety or firefighter service credit upon death, he or she will be considered to have retired with an option one allowance, calculated without an actuarial reduction, and his or her spouse will receive the allowance that would have been payable to the member.

Death Benefit — Applies to both the Hybrid Public Safety and Firefighter Retirement System and the Tier 2 DC Plan

If an employee is a non-retired member who is employed by a participating employer at the time of his or her death, his or her beneficiary(ies) will receive a payment representing 75% of the employee's highest annual salary. If the employee has less than 12 months of service, the benefit is prorated. The minimum insurance payment is \$1,000.

Death Benefits for Non-Retired Members — in the Tier 2 DC Plan

After death, any money vested in the employee's URS Savings Plans (401(k), 457(b), IRAs) is payable to his or her beneficiary(ies).

Refunds

If the employee has a balance in his or her Tier 2 Defined Contribution account, he or she may be able to withdraw funds under certain circumstances. When an employee has four years of eligible employment, the employer contributions in his or her 401(k) account becomes vested and he or she is able to take a refund of the account upon termination of employment.

If the employee terminates employment prior to the vesting period and subsequently enters employment with a URS participating employer within 10 years of the previous termination date, all employer contributions will be reinstated upon completion of the vesting period. If he or she is not re-employed and eligible to participate in the DC Plan within 10 years of the previous termination date, the funds are forfeited. If the employee makes personal deferrals (i.e., payroll deductions) to the DC Plan, those deferrals are vested immediately and may be taken as a refund when terminating employment.

Contribution Rates* *(as of 12-31-2022)*

Member contribution rate is 2.59% of covered salary. Public Safety rates range from a low of 23.74% to a high of 40.97% of salary. The Firefighter rate is 14.08% of salary.

*Includes 401(k) portion of the contribution rate.

Changes in Plan Provisions



2022 Legislation

The following retirement-related bills were passed by the Utah State Legislature in 2022:

Public Safety and Firefighters Retirement Systems

H.B. 70: Public Safety Disability Benefits Amendments

Requires a participating employer to provide a benefit protection contract for any public safety or firefighter service employee who suffers a qualifying injury (resulting from external force or violence due to the performance of an employment duty). The benefit protection program is based upon the member being awarded and receiving either ongoing monthly long-term disability benefits or ongoing monthly workers' compensation indemnity disability benefits.

General

H.B. 75: Retirement System Transparency Amendments

Allows, but not require, a participating employer that is a public employees' association or an insurer to qualify to make and complete an election no later than July 1, 2024, for the withdrawal from URS participation for its employees.

H.B. 24: Retirement Systems Revisions

The annual administrative and technical amendments to Title 49 recommended to the Legislature by URS. The changes in this bill include: 1) Requiring participating employers to report and certify employee eligibility for service credit accrual to URS within 30 days after the end of each pay period; 2) Aligning the "year" used for service credit accrual and final average salary calculation; 3) Clarifying that Tier 2 members who enter employment with an institution of higher education with prior service credit may make a one-time irrevocable election to continue retirement participation with URS; and 4) Authorizing a Tier 2 member who is the chief of any fire department or district to exempt from retirement participation.



Defined Contribution Savings Plans

Summary of Plan Provisions



Defined Contribution Savings Plans

Introduction

The 401(k), 457(b), Roth and Traditional IRAs administered by the Board are Defined Contribution Savings Plans. These Plans are generally supplemental plans to the basic retirement benefits of the Retirement Systems, but may also be used as a primary retirement plan. These Plans are voluntary tax-advantaged retirement savings programs authorized under sections 401(k), 457(b), and 408 of the Internal Revenue Code and are available to state, local government, and education employees throughout Utah whose employers have adopted the plans.

Employer Contributions

In addition to accepting employee contributions, the 401(k) and 457(b) Plans also accept employer contributions on behalf of their employees. All state and public education employees participating in the Noncontributory Retirement System receive an amount equal to 1.5% of their salary in the 401(k) Plan. Tier 2 Public Employees and Tier 2 Public Safety and Firefighter Retirement Systems participants may also receive contributions according to their retirement plan. In addition, some employers match a portion of their employees' elective deferrals.

Social Security Substitute

Organizations that have exempted themselves from Social Security coverage and have part-time, temporary, or seasonal employees, who are not participating in a qualifying retirement system, must cover these employees with a substitute plan.

Defined Contribution Savings Plans

Summary of Plan Provisions *(Continued)*

Employers may use the 401(k)/457(b) Plans as a qualifying retirement system for these employees, but must contribute a minimum of 7.5% of salary to the Plan(s) on their behalf for it to be considered a “qualifying system.” The employer may contribute the 7.5% themselves, or they may require their employees to pay a portion or all of it.

Summary of Plan Provisions

Deferral Limits

401(k) — Limited in 2022 to an annual maximum of \$20,500. Employer contributions and employee deferrals combined could not exceed the lesser of \$61,000 or 100% of compensation.

457(b) — Limited to an annual maximum of \$20,500 or 100% of compensation.

Roth and Traditional IRA — Limited to an annual maximum of \$6,000 into all IRAs owned by the participant.

Coordination of Deferrals

401(k) — Deferrals to the 401(k) and 403(b) plans must be coordinated.

457(b) — Contributions to the 457(b) must be coordinated with all 457(b) plans.

Roth and Traditional IRA — All Roth and traditional IRA contributions must be coordinated.

Catch-up Provisions

401(k) — An additional \$6,500 for participants 50 or older during the year.

457(b) — An additional \$6,500 for participants age 50 or older during the year. There is an additional “special catch-up” provision that allows participants to double their contributions to a 457(b) plan during the three years immediately preceding the year they qualify for retirement. However, the special catch-up is limited to unused deferrals allowed in previous years.

Roth and Traditional IRA — An additional \$1,000 for participants 50 or older.

Withdrawals

401(k) — Vested balances upon termination of employment, age 59½, retirement, disability, death, a qualified birth or adoption, or hardship caused by immediate and heavy financial needs. (Hardships and birth or adoption, from employee deferrals only.)

457(b) — Allowable upon termination of employment, age 59½, retirement, death, a qualified birth or adoption, or severe unforeseeable financial emergencies.

Rollovers

401(k) — Allowable from other eligible retirement plans, or to other eligible retirement plans upon termination of employment or other qualifying events. May be either a direct rollover by the Plan or an indirect rollover by the participant within 60 days after distribution.

457(b) — Allowable to other eligible retirement plans or from another 457(b) plan.

Roth and Traditional IRA — Allowable from other eligible retirement plans or to other eligible plans (depending on acceptance of receiving plan).

Vesting

401(k) — Employee and other employer contributions are fully vested. Tier 2 employer required contributions are vested after four years of eligible service (except for elected officials).

457(b) — Fully vested.

Roth and Traditional IRA — Fully Vested.

Loans

401(k) and **457(b)** — Available up to 50% of member account balance, to a maximum of \$50,000 during a 12-month period. Only one outstanding loan allowed, per plan. Tier 2 employer required contributions are not eligible.

Roth and Traditional IRA — Not available.

Short-Term Trading Fees

Each time money managers purchase or redeem stocks and bonds there are trading costs involved. Because of the costs generated by frequent or short-term trading, it became necessary to impose a short-term trading fee. Individuals who transfer any or all of their current account between core investment options more often than once every 30 days, are charged 2% of the amount transferred for each additional trade. Each transfer starts a new 30-day period.

Investment Transfer Options

Changes in deferral amounts and in the investment options for future contributions may be made at any time. Participants may make one transfer of accumulated balances within each plan no more frequently than every seven calendar days.

Defined Contribution Savings Plans Summary of Plan Provisions *(Continued)*

2022 Core Investment Options

Income Fund

The Income Fund is a stable value option and the most conservative of the investment choices. Approximately 95% of its assets are invested in investment grade bonds, which are “wrapped” with book value contracts. The contracts are financial agreements from creditworthy banks and insurance companies, protecting against changes in interest rates and allowing the returns to be smoothed over the duration of the portfolio. The remaining amount is invested in short-term instruments for liquidity.

Bond Fund

The Bond Fund invests in a diversified portfolio consisting of U.S. government securities, mortgage and asset-backed securities, corporate bonds, and short-term funds.

Balanced Fund

The Balanced Fund invests in a portfolio consisting of approximately 60% stocks and 40% bonds.

Large Cap Stock Value Fund

The Large Cap Stock Value Fund invests in a diversified portfolio of common stocks that appear to be undervalued by the stock market, but have a favorable outlook for long-term growth.

Large Cap Stock Index Fund

The Large Cap Stock Index Fund invests in stocks included in the Russell 1000 Index and is similarly weighted. This fund represents a broad range of industries in the U.S. economy.

Large Cap Stock Growth Fund

The Large Cap Stock Growth Fund emphasizes capital appreciation and seeks to identify companies with future relative earnings strength at a reasonable valuation.

International Fund

The International Fund tracks the performance of the MSCI All Country World Index – ex. U.S. – Investable Market Index (ACWI ex. U.S. IMI) as closely as possible. The index is designed as a measure of the global stock market performance of developed and emerging markets that excludes the United States.

Small Cap Stock Fund

The Small Cap Stock Fund invests in a broad cross-section of U.S. small companies whose size (market capitalization) falls within the smallest 10% of the market universe. The market universe is comprised of companies listed on the NYSE and NASDAQ.

Brokerage Window

The brokerage window is a self-directed brokerage account available through Charles Schwab. The brokerage account offers a wide variety of investment options with varying degrees of risk. The brokerage window allows the participant to choose from mutual funds, stocks, bonds, and exchange traded funds (ETFs).

Real Assets*

Private Real Estate

Private Real Estate is a fund of funds that allows investors to gain exposure to portfolios of direct real estate investments. The fund will invest primarily in existing private real estate funds, publicly traded real estate securities, and other real estate related investments. These portfolios are comprised of institutional quality commercial real estate across a broad range of real estate asset types.

International Bonds*

International Bonds

International Bonds are used to diversify the bond investments within the Target Date Funds. An international bond is a bond issued outside of the United States by a government or non-U.S. corporation.

**The Real Assets and International Bonds asset classes were exclusive to the URS Target Date Funds and are not available as a stand-alone investment option.*

Defined Contribution Savings Plans

Summary of Plan Provisions *(Concluded)*

Target Date Fund Asset Allocation

Asset Classes	Target Date 2065	Target Date 2060	Target Date 2055	Target Date 2050	Target Date 2045	Target Date 2040	Target Date 2035	Target Date 2030	Target Date 2025	Target Date 2020	Target Date 2015	Target Date Retired
URS Large Cap Stock Index Fund	42%	42%	42%	42%	41%	37%	34%	32%	28%	25%	23%	20%
URS International Stock Fund	35	35	35	35	34	31	25	19	13	9	6	6
URS Small Cap Stock Fund	11	11	11	11	10	9	7	5	3	2	1	1
Private Real Estate	6	6	6	6	6	8	10	10	9	7	4	4
URS Income Fund	—	—	—	—	—	—	—	2	8	9	11	11
URS Bond Fund	4	4	4	4	6	9	14	18	21	26	30	31
International Bonds	2	2	2	2	3	6	9	11	12	13	14	16
Global Inflation-Linked Bonds	—	—	—	—	—	—	1	3	6	9	11	11
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Global Inflation-Linked Bonds

Global Inflation-linked bonds are debt instruments created to protect investors from the effects of inflation through inflation-linked bonds issued primarily by developed countries. An example of inflation-linked bonds are TIPS (Treasury Inflation-Protected Securities), which are issued by the U.S. Government and are designed to reduce the risk of inflation by indexing the principal of the bond to an inflation rate.

URS Target Date Funds

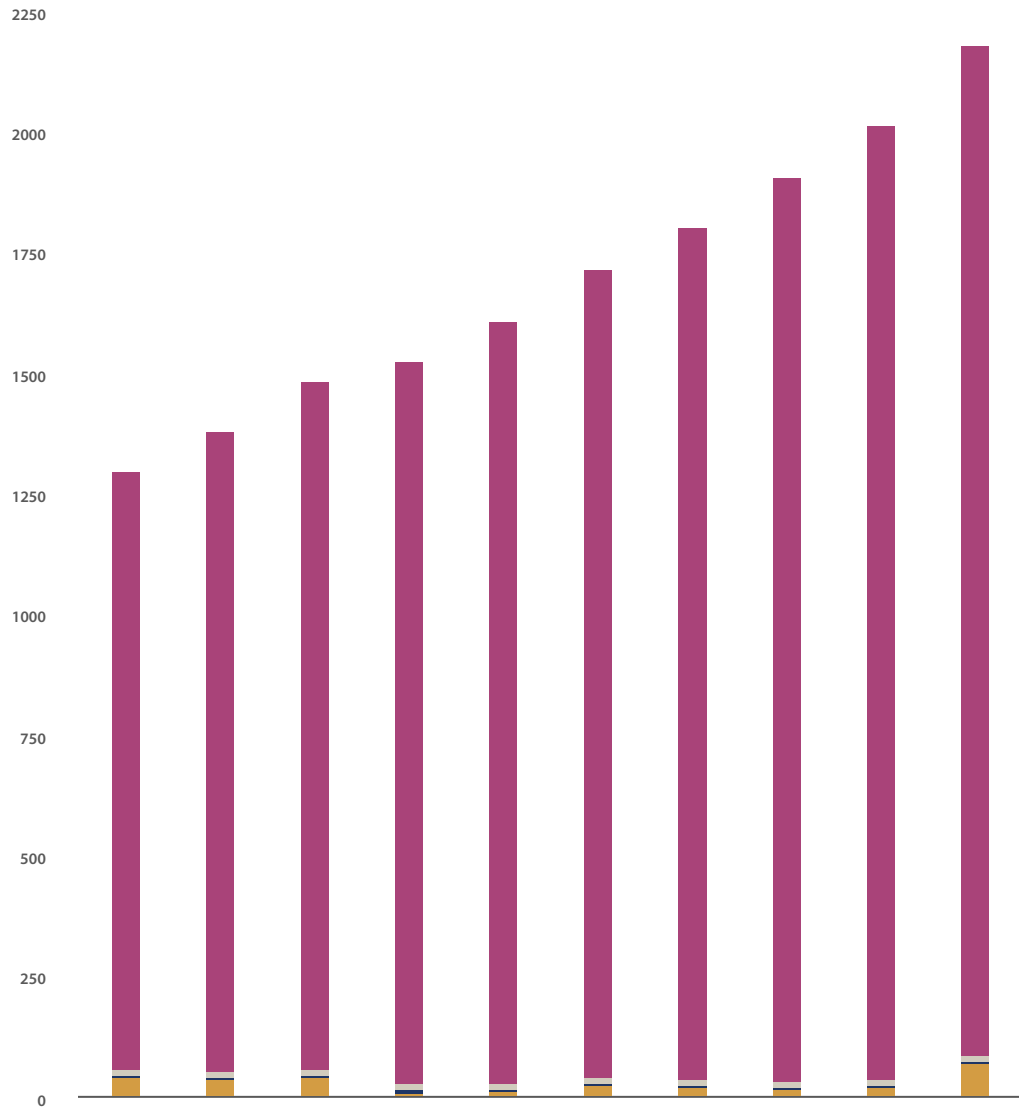
The URS Target Date Funds offer a one-fund approach to investing in the URS Savings Plans. A Target Date Fund will give participants a diversified portfolio through a single investment option. The funds will gradually adjust throughout the participant's career and into retirement. The investment mix – which includes stocks, bonds, and real assets – is automatically reallocated to be weighted more conservatively as the participant ages and enters into retirement.

The historical rates of returns for each investment fund are found on page [189](#).

Utah Retirement Systems

Deductions by Type

(in millions)



(in millions)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
■ Benefits	\$ 1,242	1,326	1,424	1,498	1,576	1,671	1,764	1,875	1,978	2,091
■ Administrative expense	10	11	11	11	12	12	11	11	13	13
■ Refunds	5	5	5	7	7	5	6	4	3	5
■ Transfers to systems	42	38	42	10	11	26	20	17	21	69
Totals	\$ 1,299	1,380	1,482	1,526	1,606	1,714	1,801	1,907	2,015	2,178

Statistical Section

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Schedules of Changes in Net Position — Defined Benefit Systems

These schedules allow readers to view changes in net assets and benefits over a 10-year period.

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Schedules of Changes in Net Position — Defined Contribution Plans

These schedules allow readers to view changes in net assets and benefits over a 10-year period.

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Schedules of Benefit Deductions by Type

These schedules provide readers with information regarding the type of benefit deductions for the last 10 years.

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Schedules of Retired Members by Type of Benefit Option

These schedules provide readers with information regarding the benefit option retired members chose.

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Schedules of Average Benefit Payments

These schedules provide readers with information regarding benefit payments by years of service.

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Schedules of Active Members by Age and Gender

These schedules provide readers with information regarding members by age and gender.

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Schedules of Retirees by Age and Gender

These schedules provide readers with information regarding retirees by age and gender.

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Schedules of Principal Participating Employers

These schedules provide readers with information regarding the largest participating employers.

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Schedules of Utah Retirement Office Employees

This schedule provides readers with information regarding the number of Utah Retirement Systems' employees.

Schedules of Participating Employers

This schedule provides readers with information regarding the participating employers and the systems in which they participate.

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Utah Retirement Systems — A Highlight History

This summary provides readers with historical highlights of the Utah Retirement Systems.

Schedules of Changes in Net Position — Defined Benefit Systems

Year Ended December 31

System	Year	(dollars in thousands)				Contributions as a Percent of Covered Payroll	Net Investment Income
		Beginning Net Position	Member Contributions	Employer Contributions	Court Fees/ Fire Insurance Tax		
Noncontributory Retirement System	2013	\$ 17,629,437	14,208	710,933	—	19.18%	\$ 2,588,981
	2014	19,915,815	13,587	772,420	—	21.63	1,419,053
	2015	21,096,512	17,020	813,449	—	23.26	366,748
	2016	21,192,437	16,308	831,631	—	24.05	1,783,911
	2017	22,618,743	17,285	854,255	—	25.31	2,987,282
	2018	25,205,127	14,602	858,444	—	25.77	(92,207)
	2019	24,666,059	11,730	888,078	—	26.68	3,499,188
	2020	27,635,923	16,385	912,525	—	27.60	3,430,989
	2021	30,478,072	16,178	942,910	—	28.05	5,201,752
	2022	35,068,535	15,415	969,922	—	28.87	(1,833,570)
Contributory Retirement System	2013	\$ 1,136,651	6,376	12,874	—	13.13%	\$ 169,510
	2014	1,281,945	5,461	12,954	—	14.29	87,577
	2015	1,269,991	4,771	11,719	—	16.50	21,251
	2016	1,183,091	3,420	8,188	—	15.27	97,693
	2017	1,204,904	2,675	7,946	—	17.59	155,949
	2018	1,283,466	2,455	6,027	—	15.34	(4,513)
	2019	1,172,429	1,950	5,433	—	15.83	163,935
	2020	1,262,292	1,728	4,759	—	15.48	154,367
	2021	1,335,639	1,445	4,204	—	15.70	220,023
	2022	1,447,237	1,240	3,675	—	16.08	(70,701)
Public Safety Retirement System	2013	\$ 2,366,057	1,258	128,744	—	35.18%	\$ 350,563
	2014	2,712,184	835	135,588	—	37.59	194,222
	2015	2,899,386	905	141,024	—	39.51	50,654
	2016	2,938,839	830	147,099	—	41.74	249,027
	2017	3,176,545	793	145,814	—	41.57	421,917
	2018	3,576,517	895	147,101	—	42.21	(13,134)
	2019	3,528,069	856	150,467	—	44.29	502,657
	2020	3,984,186	557	150,512	—	44.41	496,725
	2021	4,422,517	1,421	152,524	—	46.84	756,145
	2022	5,105,393	1,037	168,535	—	53.68	(267,352)
Firefighters Retirement System	2013	\$ 853,778	18,325	3,494	11,285	13.35%	\$ 125,685
	2014	968,661	18,300	5,514	14,154	17.67	69,070
	2015	1,031,039	18,175	6,690	17,218	21.08	17,934
	2016	1,043,059	18,729	6,954	10,569	15.60	87,746
	2017	1,115,726	18,460	6,715	1,223	7.03	146,736
	2018	1,234,407	18,305	7,021	8,747	13.88	(4,509)
	2019	1,207,889	18,701	7,443	41,859	43.50	174,141
	2020	1,391,553	18,729	7,490	20,279	24.26	173,818
	2021	1,551,194	18,985	7,499	21,136	24.98	265,931
	2022	1,799,463	19,269	6,473	22,738	25.47	(94,373)
Judges Retirement System	2013	\$ 136,127	—	4,990	1,498	42.70%	\$ 20,130
	2014	155,676	317	5,627	1,486	44.26	11,068
	2015	163,834	—	6,555	1,653	49.78	2,842
	2016	163,747	—	7,382	1,470	52.83	13,820
	2017	175,618	—	7,563	1,477	48.44	23,435
	2018	198,483	—	8,091	1,518	51.11	(730)
	2019	195,570	—	8,500	1,536	51.21	27,775
	2020	220,293	—	8,646	1,410	50.10	27,391
	2021	244,133	—	8,949	1,354	49.53	41,716
	2022	282,030	—	9,378	1,335	50.53	(14,729)

Utah Retirement Systems

Transfers from Systems	Total Additions	Benefit Payments	Refunds	Administrative & Actuarial Expense	Transfers to Systems	Total Deductions	Changes in Net Position	Ending Net Position
—	3,314,122	974,684	2,454	8,329	42,277	1,027,744	2,286,378	19,915,815
30,467	2,235,527	1,043,798	2,204	8,828	—	1,054,830	1,180,697	21,096,512
33,648	1,230,865	1,123,647	2,496	8,797	—	1,134,940	95,925	21,192,437
—	2,631,850	1,184,317	4,366	8,856	8,005	1,205,544	1,426,306	22,618,743
—	3,858,822	1,248,037	4,635	9,579	10,187	1,272,438	2,586,384	25,205,127
13,035	793,874	1,320,214	2,766	9,962	—	1,332,942	(539,068)	14,666,059
—	4,398,996	1,396,983	3,127	9,411	19,611	1,429,132	2,969,864	27,635,923
—	4,359,899	1,488,627	2,338	9,805	16,980	1,517,750	2,842,149	30,478,072
—	6,166,826	1,565,046	1,313	10,004	—	1,576,363	4,590,463	35,068,535
58,592	(789,641)	1,662,640	3,334	10,357	—	1,676,331	(2,465,972)	32,602,563
33,094	221,854	74,158	1,922	480	—	76,560	145,294	1,281,945
—	105,992	77,015	2,433	494	38,004	117,946	(11,954)	1,269,991
—	37,741	81,390	1,215	478	41,558	124,641	(86,900)	1,183,091
—	109,301	83,447	1,700	446	1,895	87,488	21,813	1,204,904
—	166,570	84,761	1,613	457	1,177	88,008	78,562	1,283,466
—	3,969	86,795	1,471	454	26,286	115,006	(111,037)	1,172,429
9,775	181,093	88,162	2,660	408	—	91,230	89,863	1,262,292
4,542	165,396	89,890	1,753	406	—	92,049	73,347	1,335,639
—	225,672	91,692	1,625	388	20,349	114,074	111,598	1,447,237
—	(65,786)	94,365	848	382	69,481	165,076	(230,862)	1,216,375
4,676	485,241	137,486	467	1,161	—	139,114	346,127	2,712,184
2,746	333,391	144,763	199	1,227	—	146,189	187,202	2,899,386
4,023	196,606	155,387	533	1,233	—	157,153	39,453	2,938,839
6,701	403,657	164,508	183	1,260	—	165,951	237,706	3,176,545
5,926	574,450	172,870	226	1,382	—	174,478	399,972	3,576,517
6,982	141,844	188,414	428	1,450	—	190,292	(48,448)	3,528,069
5,512	659,492	201,923	76	1,376	—	203,375	456,117	3,984,186
7,364	655,158	215,289	96	1,442	—	216,827	438,331	4,422,517
7,956	918,046	233,519	32	1,466	—	235,170	682,876	5,105,393
5,403	(92,377)	241,776	552	1,513	—	243,841	(336,218)	4,769,175
1,302	160,091	44,747	106	355	—	45,208	114,883	968,661
3,713	110,751	47,710	293	370	—	48,373	62,378	1,031,039
2,573	62,590	49,671	528	371	—	50,570	12,020	1,043,059
1,611	125,609	52,102	466	374	—	52,942	72,667	1,115,726
1,259	174,393	54,793	511	408	—	55,712	118,681	1,234,407
1,917	31,481	57,440	132	427	—	57,999	(26,518)	1,207,889
2,027	244,171	59,847	255	405	—	60,507	183,664	1,391,553
2,751	223,067	62,842	159	425	—	63,426	159,641	1,551,194
2,983	316,534	66,378	176	435	—	68,265	248,269	1,799,463
3,513	(42,380)	71,019	370	451	—	71,840	(114,220)	1,685,243
3,186	29,804	10,189	—	66	—	10,255	19,549	155,676
1,092	19,590	11,361	—	71	—	11,432	8,158	163,834
1,334	12,384	12,400	—	71	—	12,471	(87)	163,747
1,600	24,272	12,340	—	71	—	12,401	11,871	175,618
4,090	36,565	13,621	—	79	—	13,700	22,865	198,483
4,403	13,282	16,111	—	84	—	16,195	(2,913)	195,570
2,339	40,150	15,346	—	81	—	15,427	24,723	220,293
2,340	39,787	15,863	—	84	—	15,947	23,840	244,133
4,563	56,582	18,600	—	85	—	18,685	37,897	282,030
1,990	(2,026)	17,609	—	88	—	17,697	(19,723)	262,307

Schedules of Changes in Net Position — Defined Benefit Systems (Concluded)

Year Ended December 31

System	Year	(dollars in thousands)				Contributions as a Percent of Covered Payroll	Net Investment Income
		Beginning Net Position	Member Contributions	Employer Contributions	Court Fees/ Fire Insurance Tax		
Utah Governors and Legislators Retirement Plan	2013	\$ 9,445	—	252	—	64.62%	\$ 1,346
	2014	10,166	—	411	—	44.29	717
	2015	10,366	—	421	—	44.50	181
	2016	10,039	—	421	—	52.69	849
	2017	10,352	—	404	—	55.96	1,353
	2018	11,220	—	392	—	61.35	(41)
	2019	10,537	—	384	—	60.09	1,481
	2020	11,344	—	369	—	48.75	1,396
	2021	12,055	—	361	—	50.21	2,042
	2022	13,425	—	422	—	74.82	(693)
Tier 2 Public Employees Contributory Retirement System	2013	\$ 17,933	—	25,743	—	7.29%	\$ 4,017
	2014	47,690	—	37,299	—	7.57	4,320
	2015	89,291	—	49,645	—	7.64	1,963
	2016	140,539	—	63,062	—	7.67	14,059
	2017	217,293	—	79,175	—	7.94	33,249
	2018	329,218	—	97,680	—	8.34	(1,454)
	2019	424,633	—	119,839	—	8.68	68,228
	2020	611,583	—	138,466	—	8.61	84,040
	2021	832,485	57	168,232	—	9.29	155,495
	2022	1,154,018	164	217,179	—	10.35	(65,084)
Tier 2 Public Safety and Firefighter Contributory Retirement System	2013	\$ 1,171	—	2,451	—	12.12%	\$ 316
	2014	3,935	—	4,365	—	12.46	404
	2015	8,705	—	6,221	—	10.38	199
	2016	15,089	—	8,488	—	11.34	1,591
	2017	25,135	—	11,126	—	11.34	3,989
	2018	40,180	55	14,295	—	11.58	(180)
	2019	54,336	—	18,197	—	11.61	8,958
	2020	81,381	2,343	25,020	—	13.26	11,645
	2021	120,284	5,335	33,406	—	14.92	23,686
	2022	182,634	7,386	44,272	—	16.70	(10,791)
All Retirement Systems	2013	\$ 22,150,599	40,167	889,481	12,783	19.32%	\$ 3,260,548
	2014	25,096,072	38,500	974,178	15,640	21.16	1,786,431
	2015	26,569,124	40,871	1,035,724	18,871	22.37	461,772
	2016	26,686,840	39,287	1,073,225	12,039	22.19	2,248,696
	2017	28,544,316	39,213	1,112,998	2,700	22.32	3,773,910
	2018	31,878,618	36,312	1,139,051	10,265	22.33	(116,768)
	2019	31,259,522	33,237	1,198,341	43,395	23.11	4,446,363
	2020	35,198,555	39,742	1,247,787	21,689	22.63	4,380,371
	2021	38,996,379	43,421	1,318,085	22,490	22.78	6,666,790
	2022	45,052,735	44,511	1,419,856	24,073	23.30	(2,357,293)

Utah Retirement Systems

Transfers from Systems	Total Additions	Benefit Payments	Refunds	Administrative & Actuarial Expense	Transfers to Systems	Total Deductions	Changes in Net Position	Ending Net Position
19	1,617	892	—	4	—	896	721	10,166
—	1,128	909	—	5	14	928	200	10,366
—	602	904	—	5	20	929	(327)	10,039
—	1,270	941	—	4	12	957	313	10,352
89	1,846	973	—	5	—	978	868	11,220
—	351	978	—	5	51	1,034	(683)	10,537
—	1,865	1,012	—	4	42	1,058	807	11,344
—	1,765	1,023	10	4	17	1,054	711	12,055
7	2,410	1,036	—	4	—	1,040	1,370	13,425
—	(271)	1,010	—	4	18	1,032	(1,303)	12,122
3	29,763	—	—	6	—	6	29,757	47,690
—	41,619	—	—	16	2	18	41,601	89,291
3	51,611	333	—	30	—	363	51,248	140,539
—	77,121	316	—	51	—	367	76,754	217,293
—	112,424	417	—	82	—	499	111,925	329,218
—	96,226	692	—	119	—	811	95,415	424,633
—	188,067	965	—	152	—	1,117	186,950	611,583
—	222,506	1,397	—	207	—	1,604	220,902	832,485
—	323,784	1,982	—	269	—	2,251	321,533	1,154,018
1	152,260	2,602	—	345	—	2,947	149,313	1,303,331
—	2,767	—	—	—	3	3	2,764	3,935
2	4,771	—	—	1	—	1	4,770	8,705
—	6,420	30	—	3	3	36	6,384	15,089
—	10,079	28	—	5	—	33	10,046	25,135
—	15,115	61	—	9	—	70	15,045	40,180
—	14,170	—	—	14	—	14	14,156	54,336
—	27,155	90	—	20	—	110	27,045	81,381
—	39,008	76	—	29	—	105	38,903	120,284
—	62,427	37	—	40	—	77	62,350	182,634
—	40,867	42	4	54	—	100	40,767	223,401
42,280	4,245,259	1,242,156	4,949	10,401	42,280	1,299,786	2,945,473	25,096,072
38,020	2,852,769	1,325,556	5,129	11,012	38,020	1,379,717	1,473,052	26,569,124
41,581	1,598,819	1,423,762	4,772	10,988	41,581	1,481,103	117,716	26,686,840
9,912	3,383,159	1,497,988	6,715	11,067	9,912	1,525,682	1,857,477	28,544,317
11,364	4,940,185	1,575,533	6,985	12,001	11,364	1,605,883	3,334,302	31,878,618
26,337	1,095,197	1,670,644	4,797	12,515	26,337	1,714,293	(619,096)	31,259,522
19,653	5,740,989	1,764,328	6,118	11,857	19,653	1,801,956	3,939,033	35,198,555
16,997	5,706,586	1,875,007	4,356	12,402	16,997	1,908,762	3,797,824	38,996,379
21,495	8,072,281	1,978,593	3,146	12,691	21,495	2,015,925	6,056,356	45,052,735
69,499	(799,354)	2,091,063	5,108	13,194	69,499	2,178,864	(2,978,218)	42,074,517

Schedules of Changes in Net Position — Defined Contribution Plans

Year Ended December 31

System	Year	<i>(in thousands)</i>			
		Beginning Net Position	Contributions	Net Investment Income/ (Loss)	Total Additions
401(k) Plan	2013	\$ 3,212,874	230,086	532,216	762,302
	2014	3,746,281	255,044	213,230	468,274
	2015	3,956,751	271,097	10,658	281,755
	2016	3,980,405	290,632	332,672	623,304
	2017	4,338,973	295,804	630,516	926,320
	2018	5,002,908	317,548	(202,398)	115,150
	2019	4,834,083	324,333	892,949	1,217,282
	2020	5,722,840	358,220	870,766	1,228,986
	2021	6,639,149	440,435	992,415	1,432,850
	2022	7,657,972	418,787	(1,116,266)	(697,479)
457(b) Plan	2013	\$ 360,381	25,696	60,421	86,117
	2014	424,568	26,711	23,342	50,053
	2015	450,974	26,968	259	27,227
	2016	454,357	27,326	39,252	66,578
	2017	494,419	31,475	72,210	103,685
	2018	569,390	32,589	(24,212)	8,377
	2019	544,157	34,919	101,538	136,457
	2020	645,453	36,554	101,250	137,804
	2021	751,220	41,365	109,947	151,312
	2022	859,840	44,496	(128,799)	(84,303)
Roth IRA Plan	2013	\$ 33,750	9,113	6,870	15,983
	2014	47,763	11,664	2,816	14,480
	2015	58,842	14,073	(308)	13,765
	2016	69,714	16,585	7,200	23,785
	2017	89,165	19,669	15,389	35,058
	2018	119,297	25,280	(7,353)	17,927
	2019	131,791	28,682	27,655	56,337
	2020	180,338	34,833	32,668	67,501
	2021	238,798	40,284	39,770	80,054
	2022	304,579	44,618	(48,495)	(3,877)

Utah Retirement Systems

Refunds	Administrative Expense	Total Deductions	Changes in Net Position	Ending Net Position
223,523	5,372	228,895	533,407	3,746,281
251,496	6,308	257,804	210,470	3,956,751
251,436	6,665	258,101	23,654	3,980,405
257,651	7,085	264,736	358,568	4,338,973
254,672	7,713	262,385	663,935	5,002,908
276,023	7,952	283,975	(168,825)	4,834,083
321,069	7,456	328,525	888,757	5,722,840
305,565	7,112	312,686	916,300	6,639,149
406,840	7,187	414,027	1,018,823	7,657,972
398,377	7,837	406,214	(1,103,693)	6,554,279
21,314	616	21,930	64,187	424,568
22,920	727	23,647	26,406	450,974
23,082	762	23,844	3,383	454,357
25,706	810	26,516	40,062	494,419
27,827	887	28,714	74,971	569,390
32,708	901	33,609	(25,233)	544,157
34,328	833	35,161	101,296	645,453
31,259	778	32,039	105,765	751,220
41,904	788	42,692	108,620	859,840
43,383	847	44,230	(128,533)	731,307
1,908	62	1,970	14,013	47,763
3,310	91	3,401	11,079	58,842
2,781	112	2,893	10,872	69,714
4,192	142	4,334	19,451	89,165
4,752	174	4,926	30,132	119,297
5,230	206	5,436	12,494	131,791
7,569	221	7,790	48,547	180,338
8,803	238	9,038	58,463	238,798
14,006	267	14,273	65,781	304,579
11,726	322	12,048	(15,925)	288,654

Schedules of Changes in Net Position — Defined Contribution Plans (Concluded)

Year Ended December 31

<i>(in thousands)</i>					
System	Year	Beginning Net Position	Contributions	Net Investment Income/ (Loss)	Total Additions
Traditional IRA Plan	2013	\$ 38,595	11,213	5,050	16,263
	2014	49,852	14,930	2,645	17,575
	2015	59,822	17,206	211	17,417
	2016	68,986	16,182	4,825	21,007
	2017	81,533	20,593	9,465	30,058
	2018	102,409	30,108	(2,287)	27,821
	2019	119,905	40,674	17,942	58,616
	2020	164,427	16,598	21,450	38,048
	2021	188,817	30,196	22,345	52,541
	2022	221,894	24,174	(28,687)	(4,513)
HRA Plan*	2013	\$ 11,469	6,750	30	6,780
	2014	16,184	6,393	24	6,417
	2015	19,880	6,318	35	6,353
	2016	23,274	6,796	36	6,832
	2017	—	—	—	—
	2018	—	—	—	—
	2019	—	—	—	—
	2020	—	—	—	—
	2021	—	—	—	—
	2022	—	—	—	—
All Defined Contribution Plans	2013	\$ 3,657,069	282,858	604,587	887,445
	2014	4,284,648	314,742	242,058	556,800
	2015	4,546,269	335,662	10,875	346,519
	2016	4,596,736	357,521	383,985	741,506
	2017	5,004,090	367,541	727,580	1,095,121
	2018	5,794,004	405,525	(236,250)	169,275
	2019	5,629,936	428,608	1,040,084	1,468,692
	2020	6,713,058	446,205	1,026,134	1,472,339
	2021	7,817,984	552,280	1,164,477	1,716,757
	2022	9,044,285	532,075	(1,322,247)	(790,172)

*Administration of the HRA was transferred to PEHP in October 2016.

Utah Retirement Systems

Refunds	Administrative Expense	Total Deductions	Changes in Net Position	Ending Net Position
3,967	61	4,028	8,582	38,595
4,940	66	5,006	11,257	49,582
7,514	91	7,605	9,970	59,822
8,148	105	8,253	9,164	68,986
8,332	128	8,460	12,547	81,533
9,035	147	9,182	20,876	102,409
10,156	169	10,325	17,496	119,905
13,893	201	14,094	44,522	164,427
13,424	234	13,655	24,393	188,817
16,113	228	16,341	(20,854)	201,040
1,736	22	1,758	2,356	11,469
2,041	24	2,065	4,715	16,184
2,690	31	2,721	3,696	19,880
2,924	35	2,959	3,394	23,274
30,075	31	30,106	(23,274)	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
221,656	6,657	228,313	391,180	3,657,069
253,726	6,140	259,866	627,579	4,284,648
287,922	7,256	295,178	261,622	4,546,270
288,373	7,679	296,052	50,467	4,596,736
325,956	8,196	334,152	407,354	5,004,090
296,286	8,921	305,207	789,914	5,794,004
324,117	9,228	333,345	(164,068)	5,629,936
376,859	8,711	385,570	1,083,122	6,713,058
359,051	8,362	367,418	1,104,921	7,817,984
469,599	9,234	478,833	(1,269,005)	7,775,280

Schedules of Benefit Deductions by Type

Year Ended December 31

(in thousands)

System	Year		Service and Disability Benefits	Cost-of- Living Benefits	Supplemental Benefits	Total Benefits
Noncontributory Retirement System	2013	\$	812,550	162,134	—	974,684
	2014		871,999	171,799	—	1,043,798
	2015		943,591	180,056	—	1,123,647
	2016		1,001,451	182,866	—	1,184,317
	2017		1,063,894	184,143	—	1,248,037
	2018		1,125,160	195,054	—	1,320,214
	2019		1,184,852	212,131	—	1,396,983
	2020		1,260,170	228,457	—	1,488,627
	2021		1,327,922	237,124	—	1,565,046
	2022		1,403,260	259,380	—	1,662,640
Contributory Retirement System	2013	\$	59,203	14,778	177	74,158
	2014		62,560	14,328	127	77,015
	2015		67,510	13,785	95	81,390
	2016		70,137	13,232	78	83,447
	2017		72,073	12,624	64	84,761
	2018		74,106	12,638	51	86,795
	2019		75,044	13,083	35	88,162
	2020		76,228	13,638	24	89,890
	2021		77,864	13,828	20	91,712
	2022		79,560	14,791	14	94,365
Public Safety Retirement System	2013	\$	112,470	24,662	354	137,486
	2014		118,030	26,407	326	144,763
	2015		127,285	27,807	295	155,387
	2016		135,697	28,547	264	164,508
	2017		143,774	28,854	242	172,870
	2018		157,682	30,517	215	188,414
	2019		168,702	33,026	195	201,923
	2020		179,491	35,627	171	215,289
	2021		196,237	37,282	153	233,672
	2022		201,672	39,965	139	241,776
Firefighters Retirement System	2013	\$	34,951	9,485	311	44,747
	2014		37,597	9,844	269	47,710
	2015		39,340	10,095	236	49,671
	2016		41,687	10,195	220	52,102
	2017		44,331	10,258	204	54,793
	2018		46,547	10,700	193	57,440
	2019		48,331	11,350	166	59,847
	2020		50,671	12,023	148	62,842
	2021		53,951	12,427	130	66,508
	2022		57,540	13,355	124	71,019

Schedules of Benefit Deductions by Type (Concluded)

Year Ended December 31

(in thousands)

System	Year		Service and Disability Benefits	Cost-of-Living Benefits	Supplemental Benefits	Total Benefits
Judges Retirement System	2013	\$	8,248	1,941	—	10,189
	2014		9,305	2,056	—	11,361
	2015		10,252	2,148	—	12,400
	2016		10,070	2,260	—	12,330
	2017		11,405	2,216	—	13,621
	2018		13,805	2,306	—	16,111
	2019		12,850	2,496	—	15,346
	2020		13,174	2,689	—	15,863
	2021		15,743	2,857	—	18,600
	2022		14,606	3,003	—	17,609
Utah Governors and Legislators Retirement Plan	2013	\$	718	174	—	892
	2014		734	175	—	909
	2015		731	173	—	904
	2016		773	168	—	941
	2017		808	165	—	973
	2018		814	164	—	978
	2019		848	164	—	1,012
	2020		857	166	—	1,023
	2021		870	166	—	1,036
	2022		847	163	—	1,010
Tier 2 Public Employees Contributory Retirement System	2013		—	—	—	—
	2014		—	—	—	—
	2015	\$	333	—	—	333
	2016		316	—	—	316
	2017		417	—	—	417
	2018		691	1	—	692
	2019		962	3	—	965
	2020		1,389	8	—	1,397
	2021		1,968	14	—	1,982
	2022		2,573	29	—	2,602
Tier 2 Public Safety and Firefighter Contributory Retirement System	2013		—	—	—	—
	2014		—	—	—	—
	2015	\$	30	—	—	30
	2016		28	—	—	28
	2017		61	—	—	61
	2018		—	—	—	—
	2019		90	—	—	90
	2020		76	—	—	76
	2021		36	1	—	37
	2022		41	1	—	42

Schedules of Retired Members by Type of Benefit Option

Year Ended December 31, 2022

System	Amount of Monthly Benefit	Number of Retirees by Benefit Option								
		1	2	3	4	5	6	7	8	9
Noncontributory Retirement System	\$ 1-1,000	11,318	563	4,087	423	3,845	849	—	—	—
	1,001-2,000	6,048	603	2,901	478	3,677	1,107	—	—	—
	2,001-3,000	3,696	637	2,410	312	3,254	851	—	—	—
	3,001-4,000	2,959	699	2,356	258	2,959	710	—	—	—
	4,001-5,000	1,463	370	1,317	167	1,256	320	—	—	—
	Over 5,000	848	198	1,196	124	777	230	—	—	—
Contributory Retirement System	\$ 1-1,000	319	157	144	27	183	68	—	—	—
	1,001-2,000	249	140	194	29	177	43	—	—	—
	2,001-3,000	193	153	188	22	210	41	—	—	—
	3,001-4,000	135	102	115	16	148	36	—	—	—
	4,001-5,000	55	43	56	10	61	20	—	—	—
	Over 5,000	40	30	54	7	22	7	—	—	—
Public Safety Retirement System	\$ 1-1,000	—	—	2	—	—	—	—	521	159
	1,001-2,000	—	—	2	—	—	—	—	902	299
	2,001-3,000	—	—	1	—	—	—	—	1,748	952
	3,001-4,000	—	—	—	—	—	—	—	923	569
	4,001-5,000	—	—	—	—	—	—	—	391	231
	Over 5,000	—	—	—	—	—	—	—	262	184
Firefighters Retirement System	\$ 1-1,000	—	—	—	—	—	—	—	—	57
	1,001-2,000	—	—	1	—	—	—	—	—	182
	2,001-3,000	—	—	—	—	—	—	—	—	401
	3,001-4,000	—	—	—	—	—	—	—	—	482
	4,001-5,000	—	—	—	—	—	—	—	—	304
	Over 5,000	—	—	—	—	—	—	—	—	224

- 1- A maximum monthly benefit for the retiree's life. No benefit to a beneficiary.
- 2- A reduced lifetime benefit to the retiree. A beneficiary receives the balance in retiree's account after the monthly annuity payments are deducted.
- 3- A reduced lifetime benefit to a retiree and a lifetime benefit equal to the retiree's benefit payable to the retiree's lawful spouse at the time of retirement.
- 4- A reduced lifetime benefit to the retiree and a lifetime benefit equal to half of the retiree's benefit to the retiree's lawful spouse at the time of retirement.
- 5- Approximately 95% of the benefit in type 3 and the same lifetime benefit for retiree's lawful spouse at the time of retirement. Benefit reverts to 100% at time of spouse's death.

- 6- Approximately 98% of the benefit in type 4 and a lifetime benefit equal to half of the retiree's for retiree's lawful spouse at the time of the retirement. Benefit reverts to 100% at time of spouse's death.
- 7- Refund of reserves for members whose monthly benefit would be \$25 or less.
- 8- Normal retirement for age and service and a lifetime benefit of 65% of the retiree's benefit to the retiree's lawful spouse at the time of the retiree's death.
- 9- Normal retirement for age and service and a lifetime benefit of 75% of the retiree's benefit to the retiree's lawful spouse at the time of the retiree's death.

Schedules of Retired Members by Type of Benefit Option *(Concluded)*

Year Ended December 31, 2022

System	Amount of Monthly Benefit	Number of Retirees by Benefit Option								
		1	2	3	4	5	6	7	8	9
Judges Retirement System	\$ 1-1,000	—	—	—	—	—	—	—	—	—
	1,001-2,000	—	—	—	—	—	—	—	1	1
	2,001-3,000	—	—	—	—	—	—	—	4	1
	3,001-4,000	—	—	—	—	—	—	—	3	1
	4,001-5,000	—	—	—	—	—	—	—	5	2
	Over 5,000	—	—	—	—	—	—	—	65	81
Utah Governors and Legislators Retirement Plan*	\$ 1-1,000	—	—	2	228	—	—	—	—	—
	1,001-2,000	—	—	—	6	—	—	—	—	—
	2,001-3,000	—	—	—	—	—	—	—	—	—
	3,001-4,000	—	—	—	1	—	—	—	—	—
	4,001-5,000	—	—	—	—	—	—	—	—	—
	Over 5,000	—	—	—	—	—	—	—	—	—
Tier 2 Public Employees Contributory Retirement System	\$ 1-1,000	241	—	105	4	85	9	—	—	—
	1,001-2,000	6	—	4	1	1	—	—	—	—
	2,001-3,000	—	—	—	1	—	—	—	—	—
	3,001-4,000	—	—	—	—	—	—	—	—	—
	4,001-5,000	—	—	—	—	—	—	—	—	—
	Over 5,000	—	—	—	—	—	—	—	—	—
Tier 2 Public Safety and Firefighter Contributory Retirement System	\$ 1-1,000	4	—	1	—	—	—	—	—	—
	1,001-2,000	—	—	—	—	—	—	—	2	—
	2,001-3,000	—	—	—	—	—	—	—	—	—
	3,001-4,000	—	—	—	—	—	—	—	—	—
	4,001-5,000	—	—	—	—	—	—	—	—	—
	Over 5,000	—	—	—	—	—	—	—	—	—

* *Governors and Legislative Pension Plan provides a normal lifetime pension to the retiree and 50% of the retiree's benefit to the retiree's lawful spouse at the time of death if the retiree had four or more years of service.*

Schedules of Average Benefit Payments

December 31,

System			Years of Credited Service					
			4-10	11-15	16-20	21-25	26-30	31+
Noncontributory Retirement System	2017	Average Monthly Benefit	\$ 402	856	1,277	1,800	2,668	3,688
		Monthly Final Average Salary	\$ 2,745	3,466	3,903	4,363	5,042	5,682
		Number of Active Retired	640	438	466	456	779	561
	2018	Average Monthly Benefit	\$ 399	851	1,321	1,829	2,728	3,738
		Monthly Final Average Salary	\$ 2,674	3,567	3,919	4,428	5,148	5,862
		Number of Active Retired	759	447	485	490	734	530
	2019	Average Monthly Benefit	\$ 391	985	1,470	1,929	2,891	3,965
		Monthly Final Average Salary	\$ 2,549	3,715	4,254	4,575	5,430	6,137
		Number of Active Retired	654	453	466	477	645	542
	2020	Average Monthly Benefit	\$ 379	977	1,527	1,983	3,085	4,278
		Monthly Final Average Salary	\$ 2,534	3,787	4,494	4,669	5,522	6,451
		Number of Active Retired	616	454	490	488	768	675
	2021	Average Monthly Benefit	\$ 383	958	1,425	2,113	3,015	4,294
		Monthly Final Average Salary	\$ 2,724	3,838	4,373	5,025	5,723	6,681
		Number of Active Retired	554	464	467	444	658	618
	2022	Average Monthly Benefit	\$ 395	1,020	1,505	2,217	3,324	4,512
		Monthly Final Average Salary	\$ 2,746	3,975	4,655	5,221	6,163	7,050
		Number of Active Retired	591	424	500	488	669	615
Contributory Retirement System	2017	Average Monthly Benefit	\$ 339	604	1,031	3,758	2,243	3,249
		Monthly Final Average Salary	\$ 2,456	2,227	2,974	7,936	4,098	5,063
		Number of Active Retired	9	9	3	5	7	90
	2018	Average Monthly Benefit	\$ 270	424	1,348	2,280	3,263	3,097
		Monthly Final Average Salary	\$ 2,267	1,942	4,049	5,001	5,459	4,924
		Number of Active Retired	7	4	4	3	6	86
	2019	Average Monthly Benefit	\$ 449	535	1,007	673	4,085	4,160
		Monthly Final Average Salary	\$ 1,946	1,674	3,227	1,529	4,578	5,672
		Number of Active Retired	5	5	3	2	6	60
	2020	Average Monthly Benefit	\$ 585	763	1,366	1,295	2,514	4,169
		Monthly Final Average Salary	\$ 2,795	3,018	3,282	3,006	4,919	6,023
		Number of Active Retired	4	10	6	2	3	55
	2021	Average Monthly Benefit	\$ 353	759	1,079	1,149	2,271	4,558
		Monthly Final Average Salary	\$ 2,283	3,192	3,017	2,877	4,111	6,557
		Number of Active Retired	10	4	7	3	3	45
	2022	Average Monthly Benefit	\$ 366	886	1,209	551	3,850	4,917
		Monthly Final Average Salary	\$ 2,208	3,598	4,080	1,224	7,124	6,446
		Number of Active Retired	8	7	2	2	3	44

Schedules of Average Benefit Payments *(Continued)*

December 31,

System			Years of Credited Service					
			4-10	11-15	16-20	21-25	26-30	31+
Public Safety Retirement System	2017	Average Monthly Benefit	\$ 776	1,344	2,354	2,879	3,559	4,219
		Monthly Final Average Salary	\$ 3,160	3,834	4,961	5,205	5,542	5,793
		Number of Active Retired	13	13	104	92	31	13
	2018	Average Monthly Benefit	\$ 602	1,537	2,541	3,043	3,708	5,255
		Monthly Final Average Salary	\$ 3,075	4,251	5,241	5,706	5,983	6,971
		Number of Active Retired	14	18	143	114	56	27
	2019	Average Monthly Benefit	\$ 663	1,350	2,465	3,324	4,186	7,074
		Monthly Final Average Salary	\$ 2,860	4,155	5,112	6,003	6,084	6,868
		Number of Active Retired	16	16	124	105	44	20
	2020	Average Monthly Benefit	\$ 510	1,297	2,705	3,338	3,889	5,351
		Monthly Final Average Salary	\$ 3,170	3,487	5,302	5,725	6,379	6,397
		Number of Active Retired	14	10	130	91	58	28
	2021	Average Monthly Benefit	\$ 748	1,206	2,494	3,108	4,103	5,117
		Monthly Final Average Salary	\$ 3,688	4,050	5,525	5,929	6,428	7,874
		Number of Active Retired	7	7	166	127	45	36
	2022	Average Monthly Benefit	\$ 609	1,311	2,794	3,128	3,956	5,914
		Monthly Final Average Salary	\$ 2,951	4,586	5,759	6,106	6,310	7,741
		Number of Active Retired	15	9	110	69	39	31
Firefighters Retirement System	2017	Average Monthly Benefit	\$ 1,427	5,958	2,365	3,447	3,926	6,650
		Monthly Final Average Salary	\$ 4,571	6,402	5,801	6,841	7,186	7,220
		Number of Active Retired	5	2	21	14	14	6
	2018	Average Monthly Benefit	\$ 1,590	4,064	2,863	4,009	3,890	5,815
		Monthly Final Average Salary	\$ 3,871	5,786	5,662	7,341	6,982	7,755
		Number of Active Retired	2	2	24	14	12	7
	2019	Average Monthly Benefit	\$ 2,142	2,458	3,003	4,144	5,011	4,949
		Monthly Final Average Salary	\$ 4,283	6,603	6,692	6,436	7,211	7,471
		Number of Active Retired	1	2	16	21	9	9
	2020	Average Monthly Benefit	\$ 1,125	1,450	3,549	4,588	4,228	4,302
		Monthly Final Average Salary	\$ 4,832	6,107	6,434	6,531	7,234	7,526
		Number of Active Retired	2	3	17	16	19	4
	2021	Average Monthly Benefit	\$ —	2,433	2,970	3,394	4,346	4,308
		Monthly Final Average Salary	\$ —	5,131	6,362	6,518	6,701	7,087
		Number of Active Retired	—	4	18	15	10	11
	2022	Average Monthly Benefit	\$ —	3,566	3,558	3,883	5,333	6,487
		Monthly Final Average Salary	\$ —	6,403	7,110	7,412	7,726	8,205
		Number of Active Retired	—	2	13	23	14	8

Continued on page 254.

Schedules of Average Benefit Payments (Continued)

December 31,

System			Years of Credited Service						
			4-10	11-15	16-20	21-25	26-30	31+	
Judges Retirement System	2017	Average Monthly Benefit	\$	—	7,184	8,109	8,849	—	12,045
		Monthly Final Average Salary	\$	—	13,279	13,374	12,736	—	12,653
		Number of Active Retired		—	2	2	2	—	4
	2018	Average Monthly Benefit	\$	—	—	7,697	8,980	—	12,221
		Monthly Final Average Salary	\$	—	—	13,233	13,429	—	13,287
		Number of Active Retired		—	—	2	2	—	6
	2019	Average Monthly Benefit	\$	—	—	—	8,853	—	11,407
		Monthly Final Average Salary	\$	—	—	—	13,553	—	13,719
		Number of Active Retired		—	—	—	1	—	2
	2020	Average Monthly Benefit	\$	—	8,611	10,108	9,372	—	13,241
		Monthly Final Average Salary	\$	—	13,888	14,115	14,069	—	13,935
		Number of Active Retired		—	1	1	2	—	1
	2021	Average Monthly Benefit	\$	5,671	6,557	6,776	7,695	—	12,585
		Monthly Final Average Salary	\$	14,188	14,227	14,504	14,146	—	14,144
		Number of Active Retired		1	1	4	2	—	5
	2022	Average Monthly Benefit	\$	—	14,576	9,892	—	10,489	11,376
		Monthly Final Average Salary	\$	—	14,674	14,624	—	14,363	14,365
		Number of Active Retired		—	1	1	—	1	1
Utah Governors and Legislators Retirement Plan	2017	Average Monthly Benefit	\$	201	365	491	—	—	1,016
		Monthly Final Average Salary	\$	—	—	—	—	—	—
		Number of Active Retired		7	2	1	—	—	1
	2018	Average Monthly Benefit	\$	263	311	—	734	—	—
		Monthly Final Average Salary	\$	—	—	—	—	—	—
		Number of Active Retired		5	1	—	1	—	—
	2019	Average Monthly Benefit	\$	232	377	546	—	—	—
		Monthly Final Average Salary	\$	—	—	—	—	—	—
		Number of Active Retired		5	4	1	—	—	—
	2020	Average Monthly Benefit	\$	204	505	—	—	771	—
		Monthly Final Average Salary	\$	—	—	—	—	—	—
		Number of Active Retired		8	1	—	—	1	—
	2021	Average Monthly Benefit	\$	852	426	530	—	—	—
		Monthly Final Average Salary	\$	—	—	—	—	—	—
		Number of Active Retired		2	3	2	—	—	—
	2022	Average Monthly Benefit	\$	251	494	—	—	—	—
		Monthly Final Average Salary	\$	—	—	—	—	—	—
		Number of Active Retired		2	1	—	—	—	—

Schedules of Average Benefit Payments *(Concluded)*

December 31,

System			Years of Credited Service					
			4-10	11-15	16-20	21-25	26-30	31+
Tier 2 Public Employees Contributory Retirement System	2017	Average Monthly Benefit	\$ 176	—	—	—	—	—
		Monthly Final Average Salary	\$ 2,710	—	—	—	—	—
		Number of Active Retired	17	—	—	—	—	—
	2018	Average Monthly Benefit	\$ 240	—	—	—	—	—
		Monthly Final Average Salary	\$ 2,829	—	—	—	—	—
		Number of Active Retired	38	—	—	—	—	—
	2019	Average Monthly Benefit	\$ 259	—	—	—	—	—
		Monthly Final Average Salary	\$ 3,075	—	—	—	—	—
		Number of Active Retired	47	—	—	—	—	—
	2020	Average Monthly Benefit	\$ 276	—	—	—	—	—
		Monthly Final Average Salary	\$ 3,069	—	—	—	—	—
		Number of Active Retired	71	—	—	—	—	—
	2021	Average Monthly Benefit	\$ 329	—	—	—	—	—
		Monthly Final Average Salary	\$ 3,335	—	—	—	—	—
		Number of Active Retired	78	—	—	—	—	—
	2022	Average Monthly Benefit	\$ 439	547	—	—	—	—
		Monthly Final Average Salary	\$ 4,168	3,714	—	—	—	—
		Number of Active Retired	151	9	—	—	—	—
Tier 2 Public Safety and Firefighter Contributory Retirement System	2017	Average Monthly Benefit	\$ —	—	—	—	—	—
		Monthly Final Average Salary	\$ —	—	—	—	—	—
		Number of Active Retired	—	—	—	—	—	—
	2018	Average Monthly Benefit	\$ —	—	—	—	—	—
		Monthly Final Average Salary	\$ —	—	—	—	—	—
		Number of Active Retired	—	—	—	—	—	—
	2019	Average Monthly Benefit	\$ 1,041	—	—	—	—	—
		Monthly Final Average Salary	\$ 3,075	—	—	—	—	—
		Number of Active Retired	47	—	—	—	—	—
	2020	Average Monthly Benefit	\$ 576	—	—	—	—	—
		Monthly Final Average Salary	\$ 4,550	—	—	—	—	—
		Number of Active Retired	3	—	—	—	—	—
	2021	Average Monthly Benefit	\$ 406	—	—	—	—	—
		Monthly Final Average Salary	\$ 3,508	—	—	—	—	—
		Number of Active Retired	1	—	—	—	—	—
	2022	Average Monthly Benefit	\$ —	—	—	—	—	—
		Monthly Final Average Salary	\$ —	—	—	—	—	—
		Number of Active Retired	—	—	—	—	—	—

Schedules of Active Members by Age and Gender

Year Ended December 31, 2022

System	Ages	Male	Female	Total	System	Ages	Male	Female	Total
Noncontributory Retirement System	Under 20	—	—	—	Utah Governors and Legislators Retirement Plan	Under 20	—	—	—
	20 to 29	4	3	7		20 to 29	—	—	—
	30 to 39	1,467	2,503	3,970		30 to 39	—	1	1
	40 to 49	6,146	9,377	15,523		40 to 49	7	3	10
	50 to 54	3,212	5,462	8,674		50 to 54	4	1	5
	55 to 59	2,819	5,017	7,836		55 to 59	5	—	5
	60 to 69	3,029	5,760	8,789		60 to 69	14	3	17
	70 and Older	265	373	638		70 and Older	6	—	6
Total	16,942	28,495	45,437	Total	36	8	44		
Contributory Retirement System	Under 20	—	—	—	Tier 2 Public Employees Contributory Retirement System	Under 20	174	117	291
	20 to 29	—	—	—		20 to 29	3,811	7,127	10,938
	30 to 39	2	5	7		30 to 39	5,598	7,714	13,312
	40 to 49	8	9	17		40 to 49	3,480	6,855	10,335
	50 to 54	4	16	20		50 to 54	1,049	2,463	3,512
	55 to 59	16	36	52		55 to 59	820	1,502	2,322
	60 to 69	72	70	142		60 to 69	989	1,165	2,154
	70 and Older	4	11	15		70 and Older	174	67	241
Total	106	147	253	Total	16,095	27,010	43,105		
Public Safety Retirement System	Under 20	—	—	—	Tier 2 Public Safety and Firefighter Contributory Retirement System	Under 20	12	4	16
	20 to 29	4	—	4		20 to 29	1,896	320	2,216
	30 to 39	640	86	726		30 to 39	2,144	252	2,396
	40 to 49	1,883	234	2,117		40 to 49	511	78	589
	50 to 54	525	69	594		50 to 54	67	7	74
	55 to 59	259	53	312		55 to 59	15	3	18
	60 to 69	134	28	162		60 to 69	14	3	17
	70 and Older	2	1	3		70 and Older	—	—	—
Total	3,447	471	3,918	Total	4,659	667	5,326		
Firefighters Retirement System	Under 20	—	—	—	Tier 2 Public Employees DC Only Plan	Under 20	3	3	6
	20 to 29	1	—	1		20 to 29	619	1,546	2,165
	30 to 39	156	3	159		30 to 39	1,426	1,980	3,406
	40 to 49	697	21	718		40 to 49	813	1,551	2,364
	50 to 54	230	7	237		50 to 54	229	589	818
	55 to 59	116	2	118		55 to 59	180	383	563
	60 to 69	54	—	54		60 to 69	242	310	552
	70 and Older	2	—	2		70 and Older	44	14	58
Total	1,256	33	1,289	Total	3,556	6,376	9,932		
Judges Retirement System	Under 20	—	—	—	Tier 2 Public Safety and Firefighter DC Only Plan	Under 20	—	—	—
	20 to 29	—	—	—		20 to 29	208	38	246
	30 to 39	—	—	—		30 to 39	300	35	335
	40 to 49	19	13	32		40 to 49	106	18	124
	50 to 54	20	13	33		50 to 54	21	2	23
	55 to 59	14	9	23		55 to 59	8	4	12
	60 to 69	26	3	29		60 to 69	6	1	7
	70 and Older	2	—	2		70 and Older	—	—	—
Total	81	38	119	Total	649	98	747		

Schedules of Retirees by Age and Gender

Year Ended December 31, 2022

System	Ages	Male	Female	Total	System	Ages	Male	Female	Total
Noncontributory Retirement System	Under 55	209	275	484	Judges Retirement System	Under 55	—	—	—
	55 to 59	578	836	1,414		55 to 59	2	4	6
	60 to 64	1,903	3,551	5,454		60 to 64	4	6	10
	65 to 69	4,680	9,885	14,565		65 to 69	18	6	24
	70 to 74	5,346	11,340	16,686		70 to 74	29	10	39
	75 to 79	4,364	8,256	12,620		75 to 79	28	12	40
	80 to 84	2,771	5,004	7,775		80 to 84	14	5	19
	85 to 89	1,468	2,857	4,325		85 to 89	6	7	13
	90 to 94	573	1,054	1,627		90 to 94	4	4	8
	95 to 100	90	221	311		95 to 100	3	2	5
	Over 100	—	5	5		Over 100	—	—	—
Total	21,982	43,284	65,266	Total	108	56	164		
Contributory Retirement System	Under 55	3	5	8	Utah Governors and Legislators Retirement Plan	Under 55	—	1	1
	55 to 59	37	36	73		55 to 59	—	—	—
	60 to 64	172	189	361		60 to 64	2	1	3
	65 to 69	312	385	697		65 to 69	18	7	25
	70 to 74	316	440	756		70 to 74	45	16	61
	75 to 79	219	434	653		75 to 79	28	20	48
	80 to 84	127	301	428		80 to 84	18	16	34
	85 to 89	64	180	244		85 to 89	25	15	40
	90 to 94	34	127	161		90 to 94	8	12	20
	95 to 100	19	79	98		95 to 100	3	2	5
	Over 100	1	14	15		Over 100	—	—	—
Total	1,304	2,190	3,494	Total	147	90	237		
Public Safety Retirement System	Under 55	1,171	338	1,509	Tier 2 Public Employees Contributory Retirement System	Under 55	—	—	—
	55 to 59	722	203	925		55 to 59	—	—	—
	60 to 64	671	222	893		60 to 64	3	5	8
	65 to 69	868	293	1,161		65 to 69	132	140	272
	70 to 74	784	274	1,058		70 to 74	78	49	127
	75 to 79	600	223	823		75 to 79	35	6	41
	80 to 84	275	175	450		80 to 84	6	1	7
	85 to 89	126	101	227		85 to 89	—	1	1
	90 to 94	40	48	88		90 to 94	—	1	1
	95 to 100	4	7	11		95 to 100	—	—	—
	Over 100	—	1	1		Over 100	—	—	—
Total	5,261	1,885	7,146	Total	254	203	457		
Firefighters Retirement System	Under 55	200	51	251	Tier 2 Public Safety and Firefighter Contributory Retirement System	Under 55	—	3	3
	55 to 59	121	39	160		55 to 59	—	—	—
	60 to 64	157	36	193		60 to 64	—	—	—
	65 to 69	233	57	290		65 to 69	3	—	3
	70 to 74	251	51	302		70 to 74	1	—	1
	75 to 79	167	60	227		75 to 79	—	—	—
	80 to 84	91	34	125		80 to 84	—	—	—
	85 to 89	28	34	62		85 to 89	—	—	—
	90 to 94	15	20	35		90 to 94	—	—	—
	95 to 100	1	5	6		95 to 100	—	—	—
	Over 100	—	—	—		Over 100	—	—	—
Total	1,264	387	1,651	Total	4	3	7		

Schedules of Principal Participating Employers

Year Ended December 31

System/ Employer	2022			2021			2020			2019		
	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Members
Noncontributory Retirement System												
State Of Utah	7,697	1	16.94%	8,142	1	16.90%	8,690	1	16.99%	9,009	1	16.96%
Alpine School District	2,882	2	6.34	2,994	2	6.21	3,112	3	6.08	3,064	4	5.77
Davis School District	2,736	3	6.02	2,946	3	6.11	3,131	2	6.12	3,255	2	6.13
Granite School District	2,552	4	5.62	2,728	4	5.66	2,967	4	5.80	3,083	3	5.80
Jordan School District	1,945	5	4.28	2,023	5	4.20	2,124	5	4.15	2,158	5	4.06
Weber County School District	1,522	6	3.35	1,634	6	3.39	1,728	6	3.38	1,809	6	3.40
Salt Lake County	1,434	7	3.16	1,512	7	3.14	1,628	7	3.18	1,741	7	3.28
Nebo School District	1,364	8	3.00	1,430	8	2.97	1,512	8	2.96	1,502	8	2.83
Washington School District	1,281	9	2.82	1,344	9	2.79	1,404	9	2.74	—	—	—
Salt Lake School District	1,174	10	2.58	—	—	—	1,329	10	2.60	1,394	10	2.62
Canyons School District	—	—	—	1,253	10	2.60	—	—	—	1,395	9	2.63
University of Utah	—	—	—	—	—	—	—	—	—	—	—	—
Other	20,850	—	45.89	22,173	—	46.02	23,536	—	46.00	24,724	—	46.53
Total Noncontributory System active members	45,437	—	100.00%	48,179	—	100.00%	51,161	—	100.00%	53,134	—	100.00%
Contributory Retirement System												
Ddi Vantage	42	1	16.60%	46	1	14.65%	52	1	13.72%	58	2	12.89%
State Of Utah	32	2	12.65	40	2	12.74	48	2	12.66	60	1	13.33
Salt Lake City Corp	17	3	6.72	18	3	5.73	21	3	5.54	24	5	5.33
Duchesne County	11	4	4.35	12	5	3.82	13	6	3.43	13	8	2.89
Emery Co Care & Rehab Ctr	10	5	3.95	9	8	2.87	11	8	2.90	—	—	—
Salt Lake School District	8	6	3.16	10	7	3.18	12	7	3.17	12	9	2.67
Salt Lake County	8	7	3.16	11	6	3.50	18	4	4.75	19	7	4.22
Granite School District	8	8	3.16	15	4	4.78	17	5	4.49	21	6	4.67
Davis & Weber County Canal Co	7	9	2.77	8	9	2.55	11	9	2.90	—	—	—
Sandy City	5	10	1.98	7	10	2.23	—	—	—	—	—	—
Orem City	—	—	—	—	—	—	10	10	2.64	12	10	2.67
South Jordan City	—	—	—	—	—	—	—	—	—	—	—	—
University of Utah	—	—	—	—	—	—	—	—	—	30	3	6.67
University of Utah Hospital	—	—	—	—	—	—	—	—	—	26	4	5.78
Uintah County	—	—	—	—	—	—	—	—	—	—	—	—
Other	105	—	41.50	138	—	43.95	166	—	43.80	175	—	38.89
Total Contributory System active members	253	—	100.00%	314	—	100.00%	379	—	100.00%	450	—	100.00%
Public Safety Retirement System												
State Of Utah	1,171	1	29.89%	1,269	1	30.46%	1,410	1	30.68%	1,547	1	31.05%
Salt Lake City Corp	274	2	6.99	291	2	6.99	324	2	7.05	359	2	7.21
Salt Lake County	233	3	5.95	249	3	5.98	282	3	6.14	309	3	6.20
Unified Police Department	197	4	5.03	207	4	4.97	245	4	5.33	266	4	5.34
Utah County	165	5	4.21	175	5	4.20	191	5	4.16	203	5	4.07
Weber County Corp	83	6	2.12	87	7	2.09	132	6	2.87	143	6	2.87
Davis County	80	7	2.04	91	6	2.18	101	7	2.20	105	7	2.11
West Valley City	73	8	1.86	74	8	1.78	80	8	1.74	85	8	1.71
City Of St George	63	9	1.61	65	10	1.56	71	10	1.54	76	10	1.53
Washington County	58	10	1.48	65	9	1.56	76	9	1.65	81	9	1.63
Ogden City Corp.	—	—	—	—	—	—	—	—	—	—	—	—
West Jordan City	—	—	—	—	—	—	—	—	—	—	—	—
Other	1,521	—	38.82	1,593	—	38.24	1,684	—	36.64	1,808	—	36.29
Total Public Safety System active members	3,918	—	100.00%	4,166	—	100.00%	4,596	—	100.00%	4,982	—	100.00%

Utah Retirement Systems

2018			2017			2016			2015			2014			2013		
Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members
9,587	1	17.03%	10,277	1	17.25%	10,898	1	17.24%	11,788	1	17.27%	12,550	1	17.47%	13,510	1	17.58%
3,155	4	5.60	3,305	4	5.55	3,458	4	5.47	3,711	4	5.44	3,938	4	5.48	4,280	4	5.57
3,453	2	6.13	3,668	2	6.16	3,904	2	6.18	4,090	2	5.99	4,338	2	6.04	4,624	3	6.02
3,283	3	5.83	3,460	3	5.81	3,740	3	5.92	4,044	3	5.92	4,337	3	6.04	4,702	2	6.12
2,243	5	3.98	2,329	5	3.91	2,424	5	3.83	2,635	5	3.86	2,747	5	3.82	2,943	5	3.83
1,891	6	3.36	2,006	6	3.37	2,130	6	3.37	2,286	6	3.35	2,360	6	3.29	2,503	6	3.26
1,842	7	3.27	1,962	7	3.29	2,079	7	3.29	2,194	7	3.21	2,352	7	3.27	2,476	7	3.22
1,546	8	2.75	1,614	9	2.71	1,753	9	2.77	1,868	9	2.74	1,941	10	2.70	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1,479	10	2.63	—	—	—	1,684	10	2.66	—	—	—	1,977	9	2.75	2,144	9	2.79
—	—	—	1,588	10	2.67	—	—	—	1,880	8	2.75	—	—	—	2,076	10	2.70
1,518	9	2.70	1,620	8	2.72	1,774	8	2.81	1,864	10	2.73	2,039	8	2.84	2,290	8	2.98
26,302	—	46.72	27,749	—	46.58	29,370	—	46.46	31,913	—	46.74	33,248	—	46.29	35,297	—	45.93
56,299	—	100.00%	59,578	—	100.00%	63,214	—	100.00%	68,273	—	100.00%	71,827	—	100.00%	76,845	—	100.00%
61	2	11.75%	65	2	10.47%	68	2	9.21%	70	2	7.42%	70	5	4.66%	76	6	4.39%
76	1	14.64	101	1	16.26	117	1	15.85	152	1	16.13	186	1	12.38	237	1	13.68
27	6	5.20	36	3	5.80	44	3	5.96	53	4	5.62	73	4	4.86	84	4	4.85
15	9	2.89	16	10	2.58	17	10	2.30	24	10	2.55	68	6	4.52	73	8	4.21
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	17	9	2.74	20	9	2.71	25	9	2.65	—	—	—	—	—	—
21	7	4.05	23	7	3.70	26	7	3.52	37	7	3.92	45	10	2.99	47	10	2.71
28	5	5.39	34	5	5.48	39	5	5.28	53	4	5.62	67	8	4.46	81	5	4.67
16	8	3.08	18	8	2.90	23	8	3.12	30	8	3.18	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	10	2.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	153	2	10.18	167	2	9.64
31	3	5.97	36	4	5.80	44	3	5.96	60	3	6.36	68	6	4.52	75	7	4.33
30	4	5.78	33	6	5.31	38	6	5.15	42	6	4.45	47	9	3.13	50	9	2.89
—	—	—	—	—	—	—	—	—	—	—	—	136	3	9.05	146	3	8.42
200	—	38.54	242	—	38.97	302	—	40.92	397	—	42.10	590	—	39.25	697	—	40.22
519	—	100.00%	621	—	100.00%	738	—	100.00%	943	—	100.00%	1,503	—	100.00%	1,733	—	100.00%
1,678	1	31.63%	1,789	1	31.36%	1,881	1	31.18%	2,006	1	31.35%	2,076	1	31.12%	2,211	1	31.50%
381	2	7.18	400	2	7.01	424	2	7.03	412	2	6.44	423	3	6.34	432	3	6.15
344	3	6.48	371	3	6.50	381	3	6.32	397	3	6.20	424	2	6.35	459	2	6.54
297	4	5.60	337	4	5.91	355	4	5.89	359	4	5.61	365	4	5.47	378	4	5.39
203	5	3.83	220	5	3.86	232	5	3.85	236	5	3.69	239	5	3.58	237	5	3.38
160	6	3.02	185	6	3.24	194	6	3.22	211	6	3.30	221	6	3.31	228	6	3.25
111	7	2.09	135	7	2.37	145	7	2.40	163	7	2.55	179	7	2.68	193	7	2.75
103	8	1.94	118	8	2.07	127	8	2.11	145	8	2.27	169	8	2.53	162	8	2.31
75	10	1.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
84	9	1.58	87	9	1.53	96	9	1.59	109	9	1.70	113	9	1.69	120	9	1.71
—	—	—	—	—	—	—	—	—	97	10	1.52	110	10	1.65	116	10	1.65
—	—	—	80	10	1.40	89	10	1.48	—	—	—	—	—	—	—	—	—
1,869	—	35.23	1,982	—	34.75	2,108	—	34.95	2,264	—	35.38	2,353	—	35.27	2,483	—	35.38
5,305	—	100.00%	5,704	—	100.00%	6,032	—	100.00%	6,399	—	100.00%	6,672	—	100.00%	7,019	—	100.00%

Continued on page 260.

Schedules of Principal Participating Employers (Continued)

Year Ended December 31

System/Employer	2022			2021			2020			2019		
	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member
Firefighters Retirement System												
Unified Fire Authority	273	1	21.18%	292	1	21.50%	309	1	21.65%	321	1	21.54%
Salt Lake City Corp	228	2	17.69	238	2	17.53	253	2	17.73	262	2	17.58
West Valley City	64	3	4.97	69	3	5.08	71	3	4.98	73	3	4.90
City Of West Jordan	46	4	3.57	47	4	3.46	50	5	3.50	55	6	3.69
Provo City Corp	43	5	3.34	45	5	3.31	50	4	3.50	57	4	3.83
Weber Fire District	42	6	3.26	42	10	3.09	44	9	3.08	45	10	3.02
Ogden City Corp	41	7	3.18	44	6	3.24	48	6	3.36	55	5	3.69
So Davis Metro Fire Agency	40	8	3.10	42	8	3.09	44	8	3.08	45	8	3.02
Park City Fire Service	39	9	3.03	43	7	3.17	45	7	3.15	47	7	3.15
Sandy City	37	10	2.87	42	9	3.09	43	10	3.01	45	9	3.02
Murray City	—	—	—	—	—	—	—	—	—	—	—	—
Orem City	—	—	—	—	—	—	—	—	—	—	—	—
Other	436	—	33.82	454	—	33.43	470	—	32.94	485	—	32.55
Total Firefighters System active members	1,289	—	100.00%	1,358	—	100.00%	1,427	—	100.00%	1,490	—	100.00%
Judges Retirement System												
State Of Utah	119	1	100.00%	119	1	100.00%	119	1	100.00%	116	1	100.00%
Utah Governors and Legislators Retirement Plan												
State of Utah	44	1	100.00%	44	1	100.00%	41	1	100.00%	47	1	100.00%
Tier 2 Public Employees Contributory Retirement System												
State Of Utah	7,422	1	17.22%	6,928	1	17.68%	6,427	1	17.91%	6,034	1	17.91%
Alpine School District	2,469	2	5.73	2,171	3	5.54	2,041	3	5.69	1,933	2	5.74
Davis School District	2,379	3	5.52	2,266	2	5.78	2,065	2	5.75	1,829	3	5.43
Granite School District	2,259	4	5.24	1,940	5	4.95	1,913	4	5.33	1,754	4	5.21
Jordan School District	2,210	5	5.13	1,979	4	5.05	1,856	5	5.17	1,663	5	4.94
Canyons School District	1,478	6	3.43	1,431	6	3.65	1,322	6	3.68	1,246	6	3.70
Salt Lake County	1,385	7	3.21	1,229	7	3.14	1,057	7	2.94	1,160	7	3.44
Nebo School District	1,239	8	2.87	1,034	8	2.64	975	8	2.72	932	8	2.77
Washington School District	1,152	9	2.67	1,030	9	2.63	914	9	2.55	794	10	2.36
Salt Lake City Corp	1,082	10	2.51	—	—	—	—	—	—	—	—	—
Weber County School District	—	—	—	934	10	2.38	879	10	2.45	808	9	2.40
Salt Lake City District	—	—	—	—	—	—	—	—	—	—	—	—
University of Utah	—	—	—	—	—	—	—	—	—	—	—	—
Other	20,030	—	46.47	18,233	—	46.54	16,446	—	45.81	15,533	—	46.11
Total Tier 2 Public Employees Contributory System active members	43,105	—	100.00%	39,175	—	100.00%	35,895	—	100.00%	33,686	—	100.00%

Utah Retirement Systems

2018			2017			2016			2015			2014			2013		
Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member
334	1	21.69%	354	1	22.10%	380	1	22.85%	386	1	22.25%	395	1	22.10%	398	1	21.57%
268	2	17.40	273	2	17.04	274	2	16.48	295	2	17.00	302	2	16.90	309	2	16.75
76	3	4.94	79	3	4.93	80	4	4.81	80	4	4.61	87	4	4.87	89	4	4.82
58	6	3.77	62	5	3.87	64	5	3.85	66	6	3.80	66	7	3.69	68	8	3.69
59	5	3.83	60	6	3.75	63	6	3.79	67	5	3.86	70	5	3.92	72	5	3.90
—	—	—	—	—	—	51	9	3.07	53	9	3.05	—	—	—	—	—	—
67	4	4.35	72	4	4.49	82	3	4.93	85	3	4.90	90	3	5.04	102	3	5.53
47	8	3.05	48	9	3.00	—	—	—	—	—	—	—	—	—	—	—	—
50	7	3.25	56	7	3.50	63	6	3.79	65	7	3.75	68	6	3.81	71	6	3.85
46	9	2.99	51	8	3.18	57	8	3.43	59	8	3.40	64	8	3.58	69	7	3.74
—	—	—	47	10	2.93	—	—	—	—	—	—	51	10	2.85	55	10	2.98
45	10	2.92	—	—	—	49	10	2.95	52	10	3.00	56	9	3.13	62	9	3.36
490	—	31.82	500	—	31.21	500	—	30.07	527	—	30.37	538	—	30.11	550	—	29.81
1,540	—	100.00%	1,602	—	100.00%	1,663	—	100.00%	1,735	—	100.00%	1,787	—	100.00%	1,845	—	100.00%
116	1	100.00	114	1	100.00	115	1	100.00	112	1	100.00	114	1	100.00	112	1	100.00
52	1	100.00	52	1	100.00	61	1	100.00	93	1	100.00	105	1	100.00	99	1	100.00
5,474	1	18.07%	4,951	1	18.23%	4,345	1	17.83%	3,642	1	16.72%	2,772	1	16.09%	2,173	1	15.84%
1,729	2	5.71	1,524	2	5.61	1,361	2	5.58	1,232	3	5.66	1,090	3	6.33	1,080	2	7.87
1,605	3	5.30	1,426	3	5.25	1,263	4	5.18	980	5	4.50	778	5	4.52	591	7	4.31
1,599	4	5.28	1,408	4	5.19	1,302	3	5.34	1,028	4	4.72	829	4	4.81	664	4	4.84
1,456	5	4.81	1,205	5	4.44	1,095	6	4.49	962	6	4.42	755	6	4.38	661	5	4.82
1,128	6	3.72	1,003	6	3.69	858	7	3.52	781	7	3.59	614	7	3.56	593	6	4.32
992	7	3.27	870	8	3.20	786	8	3.23	655	8	3.01	484	9	2.81	378	9	2.76
852	8	2.81	836	9	3.08	692	9	2.84	624	9	2.87	549	8	3.19	403	8	2.94
684	10	2.26	635	10	2.34	—	—	—	—	—	—	360	10	2.09	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	494	10	2.03	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	479	10	2.20	—	—	—	363	10	2.65
713	9	2.35	887	7	3.27	1,181	5	4.85	1,458	2	6.69	1,223	2	7.10	944	3	6.88
14,059	—	46.41	12,407	—	45.69	10,995	—	45.11	9,937	—	45.63	7,771	—	45.11	5,868	—	42.78
30,291	—	100.00%	27,152	—	100.00%	24,372	—	100.00%	21,778	—	100.00%	17,225	—	100.00%	13,718	—	100.00%

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Schedules of Principal Participating Employers (Continued)

Year Ended December 31

System/Employer	2022			2021			2020			2019		
	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member
Tier 2 Public Safety and Firefighter Contributory Retirement System												
State Of Utah	1,051	1	19.73%	1,014	1	21.13%	976	1	22.69%	835	1	22.17%
Salt Lake City Corp	332	2	6.23	260	3	5.42	214	3	4.98	195	3	5.18
Salt Lake County	321	3	6.03	341	2	7.11	319	2	7.42	254	2	6.74
West Valley City	166	4	3.12	149	4	3.10	152	4	3.53	151	4	4.01
Ogden City Corp	150	5	2.82	130	5	2.71	129	5	3.00	115	5	3.05
Unified Fire Authority	139	6	2.61	127	6	2.65	99	6	2.30	71	10	1.88
Weber County Corp	115	7	2.16	98	7	2.04	89	8	2.07	83	6	2.20
Utah County	113	8	2.12	92	9	1.92	—	—	—	72	9	1.91
City Of West Jordan	108	9	2.03	98	8	2.04	87	10	2.02	—	—	—
City Of St George	105	10	1.97	—	—	—	—	—	—	—	—	—
Sandy City	—	—	—	84	10	1.75	88	9	2.05	72	8	1.91
Cache County	—	—	—	—	—	—	—	—	—	—	—	—
Davis County	—	—	—	—	—	—	90	7	2.09	—	—	—
Iron County	—	—	—	—	—	—	—	—	—	—	—	—
Park City Fire Service	—	—	—	—	—	—	—	—	—	—	—	—
South Jordan City	—	—	—	—	—	—	—	—	—	—	—	—
Unified Police Department	—	—	—	—	—	—	—	—	—	73	7	1.94
Other	2,726	—	51.18	2,406	—	50.14	2,058	—	47.85	1,846	—	49.00
Total Tier 2 PS and Firefighters System active members	5,326	—	100.00%	4,799	—	100.00%	4,301	—	100.00%	3,767	—	100.00%

Utah Retirement Systems

2018			2017			2016			2015			2014			2013		
Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members	Active Members	Rank	Percent of Total Active Members
821	1	24.87%	705	1	26.12%	626	1	27.95%	523	1	28.67%	371	1	27.87%	274	1	30.96%
161	3	4.88	116	3	4.30	95	3	4.24	58	3	3.18	51	3	3.83	38	3	4.29
218	2	6.60	203	2	7.52	176	2	7.86	132	2	7.24	122	2	9.17	93	2	10.51
125	4	3.79	88	4	3.26	68	4	3.04	32	7	1.75	22	7	1.65	—	—	—
92	5	2.79	76	5	2.82	54	5	2.41	29	9	1.59	21	9	1.58	11	9	1.24
77	7	2.33	49	9	1.82	53	6	2.37	44	4	2.41	40	4	3.01	13	7	1.47
64	8	1.94	56	7	2.07	41	9	1.83	39	6	2.14	22	7	1.65	15	6	1.69
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
63	9	1.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61	10	1.85	58	6	2.15	46	8	2.05	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
79	6	2.39	51	8	1.89	48	7	2.14	43	5	2.36	31	5	2.33	22	4	2.49
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	9	1.24
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	8	1.36
—	—	—	46	10	1.70	35	10	1.56	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	29	9	1.59	20	10	1.50	—	—	—
1,540	—	46.65	1,251	—	46.35	998	—	44.55	864	—	47.37	605	—	45.45	374	—	42.26
3,301	—	100.00%	2,699	—	100.00%	2,240	—	100.00%	1,824	—	100.00%	1,331	—	100.00%	885	—	100.00%

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Schedules of Principal Participating Employers (Concluded)

Year Ended December 31

System/Employer	2022			2021			2020			2019		
	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member
Tier 2 Public Employees DC Only Plan												
State Of Utah	2,300	1	23.16%	2,060	1	22.82%	1,952	1	23.37%	1,607	1	22.84%
Jordan School District	562	2	5.66	505	2	5.59	445	3	5.33	357	2	5.07
Alpine School District	511	3	5.14	494	3	5.47	450	2	5.39	347	3	4.93
Davis School District	492	4	4.95	469	4	5.19	427	4	5.11	336	4	4.78
Granite School District	455	5	4.58	402	5	4.45	364	5	4.36	312	5	4.43
Canyons School District	368	6	3.71	343	6	3.80	320	6	3.83	288	6	4.09
Salt Lake County	354	7	3.56	316	7	3.50	304	7	3.64	275	7	3.91
Salt Lake City Corp	254	8	2.56	226	8	2.50	229	8	2.74	186	8	2.64
Washington School District	239	9	2.41	208	10	2.30	177	10	2.12	—	—	—
Salt Lake School District	224	10	2.26	212	9	2.35	194	9	2.32	158	9	2.25
Nebo School District	—	—	—	—	—	—	—	—	—	148	10	2.10
University of Utah	—	—	—	—	—	—	—	—	—	—	—	—
Other	4,173	—	42.02	3,793	—	42.01	3,490	—	41.79	3,022	—	42.95
Total Tier 2 DC Only Public Employees System active members	9,932	—	100.00%	9,028	—	100.00%	8,352	—	100.00%	7,036	—	100.00%

Additional information will be added when it becomes available.

System/ Employer	2022			2021			2020			2019		
	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member	Active Members	Rank	Percent of Total Active Member
Tier Public Safety and Firefighter DC Only Plan												
State Of Utah	172	1	23.03%	159	1	24.13%	153	1	25.93%	143	1	27.19%
Salt Lake County	49	2	6.56	38	3	5.77	34	3	5.76	30	3	5.70
Salt Lake City Corp	48	3	6.43	42	2	6.37	42	2	7.12	40	2	7.60
West Valley City	30	4	4.02	26	4	3.95	26	4	4.41	21	4	3.99
Unified Fire Authority	27	5	3.61	21	5	3.19	13	10	2.20	12	10	2.28
Park City Fire Service	24	6	3.21	15	9	2.28	14	8	2.37	12	9	2.28
Ogden City Corp	24	7	3.21	19	6	2.88	20	5	3.39	18	5	3.42
Provo City Corp	17	8	2.28	—	—	—	—	—	—	—	—	—
Cache County	16	9	2.14	16	8	2.43	14	9	2.37	—	—	—
Logan City	15	10	2.01	—	—	—	—	—	—	15	7	2.85
City of South Salt Lake	—	—	—	16	7	2.43	15	7	2.54	—	—	—
Davis County	—	—	—	14	10	2.12	16	6	2.71	13	8	2.47
Unified Police Department	—	—	—	—	—	—	—	—	—	15	6	2.85
Other	325	—	43.51	293	—	44.46	243	—	41.19	207	—	39.35
Total Tier 2 Public Safety and Firefighter DC Only Plan active members	747	—	100.00%	659	—	100.00%	590	—	100.00%	526	—	100.00%

Additional information will be added when it becomes available.

Utah Retirement Systems

2018		
Active Members	Rank	Percent of Total Active Member
1,390	1	23.25%
302	2	5.05
278	3	4.65
245	4	4.10
272	5	4.55
248	6	4.15
231	7	3.86
164	9	2.74
—	—	—
140	10	2.34
—	—	—
188	8	3.14
2,520	—	42.15
5,978	—	100.00%

2018		
Active Members	Rank	Percent of Total Active Member
112	1	26.73%
26	3	6.21
36	2	8.59
17	5	4.06
10	6	2.39
—	—	—
19	4	4.53
10	10	2.39
10	8	2.39
11	7	2.63
—	—	—
—	—	—
10	9	2.39
157	—	37.47
419	—	100.00%

Schedule of Utah Retirement Office Employees

Year Ended December 31

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Number of employees	192	187	182	185	172	171	176	169	162	168

Schedules of Participating Employers

N / Public Employees Retirement System — Noncontributory • C / Public Employees Retirement System — Contributory
 PS / Public Safety Retirement System • F / Firefighters Retirement System • T / Tier 2 Retirement Systems
 D / 457(b) Plan • K / 401(k) Plan

Employer	N	C	PS	F	T	D	K	Employer	N	C	PS	F	T	D	K
School Districts and Education Employers								Logan School District	N	C			T	D	K
Academy for Math, Engineering and Science Charter School (AMES)	N				T	D	K	Master Academy, Inc	N				T		K
Active Re-Entry Incorporated	N				T		K	Millard School District	N	C			T	D	K
Alpine School District	N	C			T	D	K	Monticello Academy	N				T	D	K
Alpine Uniserv	N				T	D	K	Morgan School District	N				T	D	K
American Leadership Academy	N				T		K	Mountainland Applied Technology Center	N				T	D	K
Beaver School District	N				T	D	K	Murray School District	N	C			T	D	K
Bonneville Uniserv	N				T		K	Nebo School District	N	C			T	D	K
Box Elder School District	N	C			T	D	K	Noah Webster Academy, Inc	N				T	D	K
Bridgerland Applied Technology Center	N				T	D	K	North Sanpete School District	N	C			T	D	K
Cache School District	N	C			T	D	K	North Summit School District	N	C			T	D	K
Canyons School District	N				T	D	K	Northern Utah Academy of Math, Engineering and Science Charter School (NUAMES)	N				T	D	K
Carbon School District	N	C			T	D	K	Ogden School District	N	C			T	D	K
Color Country Uniserv	N				T	D	K	Ogden-Weber Applied Technical Center	N	C			T	D	K
Daggett School District	N	C			T	D	K	Park City School District	N	C			T	D	K
Davis Applied Technology College	N				T	D	K	Piute School District	N	C			T		K
Davis School District	N	C			T	D	K	Provo School District	N	C			T	D	K
Davis Uniserv	N				T	D	K	Recreation and Habilitation Services	N				T		K
Dixie Applied Technology College	N				T		K	Rich School District	N	C			T	D	K
Dixie State University	N	C	PS		T	D	K	Salt Lake Arts Academy	N				T	D	K
Duchesne School District	N	C			T	D	K	Salt Lake Community College	N	C			T	D	K
East Hollywood High School	N				T	D	K	Salt Lake School District	N	C			T	D	K
Educators Mutual Insurance	N	C			T	D	K	San Juan School District	N	C			T	D	K
Emery School District	N	C			T	D	K	Sevier School District	N	C			T	D	K
Esperanza Elementary School	N				T		K	Snow College	N	C			T	D	K
Fast Forward Charter High School	N				T		K	Soldier Hollow Charter School	N				T		K
Garfield School District	N	C			T		K	South Sanpete School District	N	C			T	D	K
Grand School District	N	C			T	D	K	South Summit School District	N				T	D	K
Granite School District	N	C			T	D	K	Southern Utah University	N	C	PS		T	D	K
Granite Uniserv	N				T	D	K	Southwest Applied Technology Center	N				T		K
High Desert Uniserv	N				T	D	K	Southwest Educational Development Center	N				T		K
High School Activity Association	N	C			T		K	Space Dynamics Lab/USU	N				T	D	K
Intech Collegiate High School	N				T		K	Success Academy	N				T		K
Iron School District	N	C			T	D	K	Summit Academy Charter School	N				T	D	K
Itineris High School	N				T	D	K	Summit Academy High School	N				T		K
Jordan School District	N	C			T	D	K	Tintic School District	N	C			T		K
Jordan Uniserv	N				T	D	K	Tooele Applied Technology College	N	C			T	D	K
Juab School District	N	C			T	D	K	Tooele School District	N	C			T	D	K
Kane School District	N	C			T	D	K	Tuacahn High School	N				T		K
Liberty Academy Charter School	N				T		K	Uintah Basin Applied Technology Center	N	C			T	D	K
								Uintah School District	N	C			T	D	K

Schedules of Participating Employers (Continued)

Employer	N	C	PS	F	T	D	K
University of Utah	N	C	PS		T		K
University of Utah Hospital	N	C			T		K
Utah County Academy of Sciences	N				T		K
Utah Education Association	N	C			T	D	K
Utah School Boards Association	N				T		K
Utah School Boards Risk Man Mut Ins Assn	N				T	D	K
Utah School Employee Association	N				T	D	K
Utah State University	N	C	PS		T	D	K
Utah Uniserv	N	C			T		
Utah Valley University	N	C			T	D	K
Utah Valley Care & Training Center/ Recreation & Rehabilitation Services	N				T		K
Wasatch School District	N	C			T	D	K
Wasatch Uniserv	N				T	D	K
Washington School District	N	C			T	D	K
Wayne School District	N				T	D	K
Weber County School District	N	C			T	D	K
Weber State University	N	C			T	D	K
Woodland Peaks Uniserv	N				T	D	K

State and Other Employers

Heber Valley Historic Railroad	N				T		K
State of Utah (also participates in the Judges Retirement System and the Utah Governors and Legislators Retirement Plan)	N	C	PS	F	T	D	K
Utah Communications Authority	N				T	D	K
Utah Housing Corporation	N	C			T	D	K
Utah Retirement Systems	N				T	D	K
Utah Safety Council	N				T		K
Utah State Fair Corporation	N				T	D	K
Workers Compensation Fund	N	C			T	D	K

Counties and County Organizations

Beaver County	N		PS		T	D	K
Box Elder County	N	C	PS	F	T	D	K
Cache County	N	C	PS	F	T	D	K
Carbon County	N	C	PS		T	D	K
Daggett County	N		PS		T	D	K
Davis County	N		PS		T	D	K
Duchesne County	N	C	PS		T	D	K
Emery County	N	C	PS		T	D	K
Garfield County	N	C	PS		T	D	K
Grand County	N	C	PS		T	D	K
Iron County	N	C	PS		T	D	K
Juab County	N	C	PS		T		K
Juab Special Service District	N				T	D	K
Kane County	N		PS		T	D	K
Millard County	N	C	PS		T	D	K
Morgan County	N		PS	F	T	D	K
Piute County	N		PS		T		K
Rich County		C	PS		T		K
Salt Lake County	N	C	PS	F	T	D	K
San Juan County	N	C	PS		T	D	K
Sanpete County	N	C	PS		T		K
Sevier County	N	C	PS		T		K
Summit County	N	C	PS		T		K
Tooele County	N	C	PS		T	D	K
Uintah County	N	C	PS		T	D	K
Unified Fire Authority	N		PS	F	T	D	K
Unified Police Department of Greater Salt Lake	N		PS		T	D	K

Employer	N	C	PS	F	T	D	K
Utah County	N	C	PS		T		K
Wasatch County	N		PS		T	D	K
Wasatch County Fire District	N			F	T	D	K
Washington County	N		PS		T	D	K
Wayne County	N		PS		T		K
Weber County	N	C	PS		T	D	K
Weber Fire District	N	C		F	T	D	K

Cities and Towns

Alpine City	N				T	D	K
Alta Town	N				T		K
American Fork City	N		PS	F	T		K
Annabella Town	N				T		K
Apple Valley Town	N			F	T		K
Aurora City	N				T		K
Ballard City	N				T	D	K
Beaver City	N				T	D	K
Bicknell Town	N				T		K
Big Water Municipal Corp	N		PS		T		K
Blanding City	N		PS		T		K
Bluffdale City	N	C	PS		T	D	K
Bountiful City	N	C	PS	F	T	D	K
Brian Head Town	N	C	PS		T	D	K
Bryce Canyon City	N				T	D	K
Brigham City	N	C	PS	F	T	D	K
Castle Dale City	N				T		K
Cedar City	N		PS	F	T	D	K
Cedar Hills City	N				T	D	K
Centerfield City	N		PS		T		K
Centerville	N	C	PS		T	D	K
Central Valley Town	N				T	D	K
Clearfield City	N		PS	F	T	D	K
Cleveland Town	N				T		K
Clinton City	N	C	PS	F	T	D	K
Coalville City	N				T		K
Corinne City		C			T		K
Cottonwood Heights City	N		PS		T	D	K
Daniel Town	N				T		K
Delta City	N	C			T	D	K
Draper City	N				T	D	K
Duchesne City	N				T		K
Eagle Mountain City	N			F	T	D	K
East Carbon City	N		PS		T	D	K
Elk Ridge Town	N				T		K
Elwood	N				T	D	K
Emery Town		C			T		K
Enoch City	N		PS		T		K
Enterprise City	N				T		K
Ephraim City	N		PS	F	T	D	K
Escalante Town	N		PS		T	D	K
Eureka City	N				T	D	K
Fairview City	N		PS		T	D	K
Farmington City	N		PS	F	T	D	K
Farr West City	N				T	D	K
Ferron City	N				T		K
Fillmore City	N				T	D	K
Fountain Green City	N		PS		T		
Francis Town	N				T		K
Fruit Heights City	N				T	D	K
Garden City	N				T		K
Garland City		C	PS		T		K

Schedules of Participating Employers (Continued)

Employer	N	C	PS	F	T	D	K	Employer	N	C	PS	F	T	D	K
Genola Town	N				T		K	Orderville Town	N				T		K
Goshen Town	N				T		K	Orem City	N	C	PS	F	T	D	K
Grantsville City	N		PS		T	D	K	Panguitch City	N				T		K
Green River City	N				T		K	Paragonah Town			C			T	D
Gunnison City	N		PS		T	D	K	Park City	N	C	PS		T		K
Harrisville City	N	C	PS		T	D	K	Parowan City	N	C	PS		T	D	K
Heber City	N		PS		T	D	K	Payson City	N		PS	F	T	D	K
Helper City	N		PS		T		K	Perry City	N		PS		T	D	K
Herriman City	N		PS		T	D	K	Plain City	N				T	D	K
Hideout Town	N				T		K	Pleasant Grove City	N		PS	F	T		K
Highland City	N				T	D	K	Pleasant View City	N	C	PS		T	D	K
Hinckley Town	N				T		K	Price City	N	C	PS	F	T	D	K
Holladay City	N				T	D	K	Providence City	N				T	D	K
Hooper City	N				T		K	Provo City	N	C	PS	F	T	D	K
Huntington City	N				T		K	Randolph Town	N				T		
Hurricane City	N		PS	F	T	D	K	Redmond Town	N				T		
Hyde Park City	N				T		K	Richfield City	N	C	PS		T		K
Hyrum City	N				T	D	K	Richmond City	N				T		K
Ivins City	N		PS	F	T	D	K	Riverdale City	N	C	PS	F	T	D	K
Kamas City	N		PS		T	D	K	Riverton City	N	C		F	T	D	K
Kanab City	N		PS	F	T	D	K	Roosevelt City	N		PS	F	T	D	K
Kaysville City	N	C	PS	F	T	D	K	Roy City	N	C	PS	F	T	D	K
LaVerkin City	N	C	PS		T		K	Salem City	N		PS		T	D	K
Layton City	N	C	PS	F	T	D	K	Salina City	N		PS		T	D	K
Lehi City	N	C	PS	F	T	D	K	Salt Lake City	N	C	PS	F	T	D	K
Levan Town	N				T			Sandy City	N	C	PS	F	T	D	K
Lewiston City	N				T		K	Santa Clara City	N		PS	F	T	D	K
Lindon City	N		PS		T	D	K	Santaquin City	N		PS	F	T	D	K
Logan City	N	C	PS	F	T	D	K	Saratoga Springs Town	N		PS	F	T	D	K
Lone Peak Public Safety District	N		PS	F	T	D	K	Smithfield City	N		PS	F	T		K
Manila Town	N	C			T		K	South Jordan City	N	C	PS	F	T	D	K
Manti City	N				T		K	South Ogden City	N		PS	F	T	D	K
Mantua City	N		PS		T		K	South Salt Lake City	N		PS	F	T	D	K
Mapleton City	N		PS	F	T	D	K	South Weber City	N			F	T		K
Marriott/Slaterville City	N				T		K	Spanish Fork City	N		PS	F	T	D	K
Mayfield Town	N				T		K	Spring City	N	C	PS		T		K
Meadow Town	N				T		K	Springdale Town	N		PS		T	D	K
Mendon City	N				T		K	Springville City	N	C	PS	F	T		K
Midvale City	N	C	PS	F	T	D	K	St. George City	N	C	PS		T	D	K
Midway City	N	C			T		K	Stockton Town	N				T		K
Milford City	N		PS		T		K	Sunset City	N	C	PS		T		K
Millcreek City	N				T	D	K	Syracuse City	N		PS	F	T	D	K
Millville City	N				T		K	Taylorville City	N		PS		T	D	K
Minersville Town	N				T		K	Tooele City	N	C	PS	F	T	D	K
Moab City	N	C	PS		T	D	K	Toquerville City	N				T	D	K
Mona City	N				T		K	Torrey Town	N				T		K
Monroe City	N				T		K	Tremonton City	N	C	PS		T	D	K
Monticello City	N		PS		T	D	K	Uintah City	N				T		K
Morgan City	N				T	D	K	Vernal City	N	C	PS		T	D	K
Moroni City	N		PS		T		K	Vineyard Town	N				T	D	K
Mt Pleasant City	N	C	PS		T		K	Washington City	N			F	T	D	K
Murray City	N	C	PS	F	T	D	K	Washington Terrace City	N		PS	F	T	D	K
Myton City	N				T		K	Wellington City	N		PS		T		K
Naples City	N	C	PS		T		K	Wellsville City	N				T		K
Nephi City	N		PS		T	D	K	Wendover City	N		PS		T	D	K
Nibley City	N				T		K	West Bountiful City	N	C	PS		T	D	K
North Logan City	N	C	PS	F	T	D	K	West Haven City	N				T	D	K
North Ogden City	N	C	PS	F	T		K	West Jordan City	N	C	PS	F	T	D	K
North Salt Lake City	N		PS		T	D	K	West Point City	N				T	D	K
Oakley City		C			T	D	K	West Valley City	N	C	PS	F	T	D	K
Ogden City	N	C	PS	F	T	D	K	Willard City	N		PS		T	D	K
Orangeville City	N				T		K	Woods Cross City	N	C	PS		T	D	K

Schedules of Participating Employers (Continued)

Employer	N	C	PS	F	T	D	K
Other Government Entities							
Ash Creek Special Service District	N				T	D	K
Ashley Valley Sewer Management Board	N				T	D	K
Ashley Valley Improvement District	N				T		K
Bear Lake Special Service District	N				T		K
Bear River Association of Governments	N				T	D	K
Bear River Health Department	N	C			T	D	K
Bear River Mental Health	N				T	D	K
Bear River Water District	N				T		K
Beaver County Special Service District	N				T		K
Beaver Housing Authority	N				T		K
Beaver Valley Hospital	N				T	D	K
Benchland Water Company	N				T		K
Big Plains Water and Sewer Special Service District	N				T	D	K
Bona Vista Water Improvement	N				T	D	K
Bountiful Irrigation District	N				T	D	K
Box Elder County Mosquito District	N				T		K
Cache Metro Planning Organization	N				T		K
Carbon County Recreation and Transportation Special Service District	N				T		K
Castle Valley Special Service District	N	C			T	D	K
Cedar City Housing Authority	N				T	D	K
Cedar Mountain Fire Protection District	N			F	T		K
Central Davis Sewer District	N				T	D	K
Central Iron County Water Conservancy District	N				T		K
Central Utah 911	N				T		K
Central Utah Counseling Center	N				T	D	K
Central Utah Public Health	N				T	D	K
Central Utah Water District	N				T	D	K
Central Wasatch Commission	N				T	D	K
Central Weber Sewer District	N	C			T	D	K
Children's Aid Society—Utah	N				T		K
Cottonwood Heights P&R Services	N				T	D	K
Cottonwood Improvement District	N				T	D	K
Council on Aging — Golden Age Center Special Service District	N				T	D	K
Dammeron Valley Fire Special Service District				F	T		
Davis & Weber Counties Canal Company		C			T	D	K
Davis Behavioral Health	N				T	D	K
Davis County Housing Authority	N	C			T		K
Davis County Mosquito Abatement	N				T		K
Davis County Solid Waste Management	N				T	D	K
DDI Advantage		C			T		K
Duchesne County Mosquito District		C			T		
Duchesne County Water Conservancy District	N				T	D	K
East Duchesne Culinary Water Imp District	N				T		K
Emery County Recreation Special Service District		C			T	D	K
Emery Water Conservancy District	N				T		K
Five-County Association of Governments	N	C			T	D	K
Four Corners Regional Care Center	N	C			T	D	K
Fox Hollow Golf Course	N				T		K
Garden City Fire District				F	T		K
Grand County EMS Special Service District	N				T		K
Grand County Solid Waste Mgmt.	N				T		K
Grand County Water Sewer/Service	N				T		K
Granger-Hunter Improvement District	N				T	D	K

Employer	N	C	PS	F	T	D	K
Greater Salt Lake Municipal Services District	N				T	D	K
Gunnison Valley Fire Department	N		PS		T	D	K
Gunnison Valley Hospital	N	C			T	D	K
Heber Light & Power	N				T	D	K
Heber Valley Special District	N				T		
High Valley Transit District	N				T		
Hooper Water Improvement District	N				T	D	K
Housing Authority of Carbon County	N				T		K
Housing Authority of Ogden City	N				T		K
Housing Authority of Salt Lake City	N	C			T	D	K
Housing Connect	N				T		K
Hurricane Valley Fire Spec. Service District				F	T		K
Impact Mitigation Special Service District	N				T		K
Jordan River Commission	N				T	D	K
Jordan Valley Water Conservancy District	N	C			T	D	K
Jordanelle Special Service District	N				T	D	K
Kane Water Conservancy District	N				T		K
Kearns Improvement District	N	C			T	D	K
Leeds Area Special Service District				F	T		
Lone Peak Safety District	N		PS	F	T	D	K
Maesar Water Improvement District	N				T		K
Magna Mosquito Abatement	N				T		K
Metro Water District—SLC/Sandy	N				T	D	K
Midvalley Improvement District	N				T		K
Military Installation Development Authority	N				T		K
Millard County Care and Rehabilitation, Inc	N				T		K
Moab Valley Fire Protection	N			F	T		K
Mountain Green Sewer Improvement District	N				T	D	K
Mountain Regional Water Special Service District	N				T		K
Mountainland Association of Governments	N	C			T	D	K
Mt. Olympus Improvement District	N				T		K
Nebo Credit Union	N				T		K
North Davis County Sewer District	N	C			T		K
North Davis Fire District	N			F	T		K
North East Counseling Center	N				T	D	K
North Emery Water Users Special Service District	N				T		K
North Fork Special Service District	N				T		K
North Park Police Agency	N		PS		T	D	K
North Pointe Solid Waste Special Service District	N				T	D	K
North Summit Fire Service District	N			F	T	D	K
North Tooele County Fire Protection Service District	N			F	T	D	K
North View Fire District	N			F	T		K
Northern Utah Environmental Resource Agency	N				T	D	K
Oquirrh Recreation and Parks District	N				T	D	K
Park City Fire Service District	N			F	T	D	K
Powder Mountain Water and Sewer	N				T		K
Price River Water Improvement	N				T	D	K
Provo Housing Authority	N				T		K
Provo River Water Users	N				T	D	K
Roosevelt City Housing Authority	N				T		
Roy Water Conservancy District	N				T	D	K
Salt Lake City Library	N				T	D	K
Salt Lake City Mosquito Abatement	N				T		K
Salt Lake City Sub. Sanitation #1	N				T		K
Salt Lake County Service Area 3	N				T		K

Schedules of Participating Employers (Continued)

Employer	N	C	PS	F	T	D	K
San Juan Mental Health/Substance Abuse District	N				T		K
San Rafael Special Service District	N				T	D	K
Sandy Suburban Improvement District	N				T	D	K
Six-County Association of Governments	N	C			T	D	K
Six-County Infrastructure Coalition	N				T		K
Snyderville Basin Special Reclamation District	N	C			T	D	K
Snyderville Basin Water Reclamation District	N	C			T	D	K
Solid Waste Management Special Service District #1	N				T		K
Solitude Improvement District	N				T		K
South Davis County Sewer Improvement District	N	C			T	D	K
South Davis County Water Improvement District	N				T	D	K
South Davis Metro Fire Agency	N			F	T	D	K
South Davis Recreation Center	N				T	D	K
South Ogden Conservancy District	N				T	D	K
South Utah Valley Animal Services Special Service District	N				T		K
South Utah Valley Electric Service District	N				T		K
South Utah Valley Solid Waste	N				T		K
South Valley Sewer District	N	C			T	D	K
South Valley Water Reclamation Facility	N				T		K
Southeastern Utah Assoc. of Governments	N	C			T	D	K
Southeastern Utah Health	N	C			T		K
Southern Salt Lake Valley Mosquito Abatement	N				T	D	K
Southern Utah Valley Power System	N				T	D	K
Southwest Behavioral Health Center	N				T	D	K
Southwest Mosquito Abatement and Control District	N				T		K
Southwest Utah Public Health Department	N	C			T	D	K
Special Service District #1	N				T	D	K
St. George Housing Authority	N				T		K
Stansbury Park Improvement District	N				T	D	K
Stansbury Service Agency	N				T		K
Statewide Association of Public Attorneys	N				T		K
Summit Country Service Area 3	N				T	D	K
Summit Mosquito Abatement District	N				T		K
Taylor West Weber Water Improvement District	N						K
Taylorville – Bennion Improvement	N				T	D	K
Timber Lakes Special Service District	N				T		K
Timpanogos Special Service District	N	C			T		K
Tooele County Housing	N				T	D	K
Tooele Valley Mosquito Abatement District	N				T		K
Trans-Jordan Cities	N				T	D	K
Tricounty Health Department	N				T	D	K
Tridell-Lapoint Water District	N				T		K
Uintah Animal Control and Shelter Special Service District	N				T		K
Uintah Basin Assistance Council	N				T		K
Uintah Basin Association of Government	N				T	D	K
Uintah Basin Tri-County Mental Health/NE Counseling Center	N				T	D	K
Uintah County Care Center	N				T	D	K
Uintah County Mosquito Abatement	N				T		K
Uintah Fire Suppression Special Service District				F	T		K

Employer	N	C	PS	F	T	D	K
Uintah Highlands Improvement District	N				T		K
Uintah Recreation District	N				T	D	K
Uintah Transportation Special Service District	N				T		K
Uintah Water Conservancy District	N				T		K
Unified Police Department	N		PS		T	D	K
Upper Country Water District	N				T	D	K
Utah Association of Counties	N				T		K
Utah Counties Indemnity Pool	N				T		K
Utah County Housing Authority	N	C			T	D	K
Utah Local Governments Trust	N				T	D	K
Utah Lake Commission	N				T		K
Utah Lake Distributing Company	N						K
Utah League of Cities & Towns		C			T		K
Utah Local Government Trust	N				T	D	K
Utah Municipal Power Agency	N				T		K
Utah Public Employees Association	N	C			T	D	K
Utah Telecommunication Open Infrastructure Agency (UTOPIA)	N				T		K
Utah Valley Dispatch Special Services District	N				T		K
Utah Zoological Society	N	C			T		K
Valley Emergency Communication Center	N				T	D	K
Wasatch Front Regional Council		C			T	D	K
Wasatch Front Waste and Recycling District	N				T	D	K
Wasatch Integrated Waste Management	N				T	D	K
Wasatch Mental Health Special Services District	N	C			T	D	K
Washington County Solid Waste #1	N				T	D	K
Washington County Water District	N	C			T		K
Waste Management Service District #5	N				T		K
Weber Area Dispatch 911 & Emergency Services District	N		PS		T	D	K
Weber Basin Water Conservancy	N				T	D	K
Weber County Mosquito Abatement	N				T	D	K
Weber Human Services	N				T	D	K
Weber River Water Users		C			T		K
Western Kane County Special Service District #1	N				T		K
White City Water Improvement District	N				T	D	K

Total Participating Employers

Noncontributory	482
Contributory	159
Public Safety	135
Firefighters	72
Judges	1
Governor and Legislators	1
Tier 2 Public Employees	493
Tier 2 Public Safety and Firefighter	155
457(b) Plan	303
401(k) Plan	487

Schedules of Participating Employers *(Concluded)*

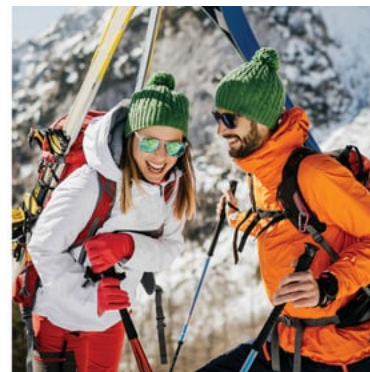
Employer

Inactive Units

American Fork Hospital	Liberty Academy Charter	Tooele Valley Hospital
Bay Area Refuse Disposal	Master Academy Inc	Trail Incorporated
Bingham City	Midvale Wastewater Treatment	Twin Creeks Special Service District
Bonneville Uniserv	Midway Sanitation District	U of U Research Institute
Box Elder County Nursing Home	Milford Valley Hospital	Uintah Basin Counseling
Canyonlands Care Center	Morgan County Historical Society	Uintah Basin District Health
Carbon County Hospital	Morgan County Library	Uintah Basin Medical Center
Carbon Nursing Home	Mountain America Credit Union	Uintah County Council on Aging
Cedar City Library	Nebo Credit Union	Uintah County Hospital
Central Utah Ed Serv	Northern Utah Crime	USU Community Credit Union
Children's Aid Society	Ogden Weber/NEA/UEA Uniserv	USU Credit Union
Coalville Health Center	Payson City Hospital	UT Association of Secondary School Principal
College Of Eastern Utah	Pioneer Care Center	UT Partnership for Education Economics
Cottage Program	Reg 2 Law Enforcement Plan Agency	Utah College of Applied Technology
Davis County Department of Human Services	S L City Credit Union	Utah County Council of Government
Department of Corrections - Inmates	S L School Credit Union	Utah Industries for the Blind
Department of Employment Security	Salt Lake County Fair	Utah Local Governments Trust
Dixie Center at St. George	San Juan County Hospital	Utah Risk Management Mutual Association
Dixie Hospital	Six-County Economic Development	Utah Technical Finance Corporation
East Layton	SL School Credit Union	Utah Uniserv
Emery Medical Center	Snow College South	Valley Mental Health
Four Corners Regional Care Center	South Davis Fire Department	Wasatch County Hospital
Golden Hours Homemaker	Statewide Association of Prosecutors	Washington County A.R.C.
Grand County Cemetery MTCE District	Sugarhouse Park Authority	Weber County Hospital
Grand County Road Special Services District	Summit Employment	Weber Economic Development Corporation
Guardian Life Insurance Co	Summit Park Water Speical Service District	Weber River Water Quality Council
Hiawatha Town	Sunnyside City	West Millard Hospital
I W Allen Hospital	Thomas Edison Charter	West Millard Recreation
Juab County Hospital	Timpanogos Academy	
Leeds Area Special Service District	Tooele Council on Aging	

For financial reporting purposes, this group is comprised of participating employers that previously made contributions to retirement systems and plans but did not make any such contributions during the year covered by this report.

A Highlight History 1907-2022



1907

The Legislature authorizes the organization of local teacher retirement associations.

1908

Salt Lake City institutes the first teacher retirement commission. Ogden follows in 1933 and Provo in 1934.

1919

First statewide pension plan for all full-time paid and volunteer firemen. Actuarially unsound, the system would be transferred to the Retirement Office in 1965.

1921

First police pension plans in Salt Lake, Ogden, Provo, and Logan. Actuarially unsound, these plans would be transferred to the Public Safety Retirement System in 1969.

1927

The Prison and Industrial School Guards Retirement System is enacted. Industrial school guards join the teachers retirement system in 1937. Prison guards transfer to the Public Safety Retirement System in 1970.

1934

The Utah Education Association prepares a teacher retirement plan to present to the Legislature. This plan will form much of the basis for a new retirement system.

1937

First statewide teachers retirement system. Seven member board hires Ray L. Lillywhite as the first executive secretary.

1943

Utah Supreme Court rules that a retiree's statutory retirement benefit cannot be reduced, affirming the principle of vested rights. The Court would later affirm that a vested retirement benefit may not be reduced without providing a "substantial substitute."

1947

The State Officers' and Employees' Retirement System is created with a 3% contribution rate each by employee and employer.

Teachers in local systems are required to join the State Teachers Retirement System.

1948

The Utah Supreme Court permits service credit for prior service in parochial schools.

A Highlight History 1907-2022 *(Continued)*

1949

The State Officers and Employees Retirement System is renamed The Public Employees Retirement System; it will cover all public employees and judges. Retirement benefit ceiling is \$100 a month.

1952

Ray Lillywhite resigns; Leonard W. McDonald is hired as second executive secretary of the Teachers Retirement System.

1953

The short-lived Teachers Retirement System is liquidated in favor of Social Security.

1954

The Teachers Retirement System is replaced by the Utah School Employees Retirement System and integrated with Social Security to preserve its solvency. Local teacher retirement associations are terminated.

1957

Minimum monthly retirement benefit is \$85.

1959

The Utah State Public Employees Association is formed with the intent to produce a comprehensive plan for a statewide public employee retirement system.

1961

The Public Employees Retirement System is created with a seven member board.

The public employees and teachers retirement systems retain separate boards but unite under a single administrator and office.

1963

Creation of a single board for all retirement systems is the crowning achievement in Utah public retirement history and the birth of today's Utah Retirement Systems.

1967

The heretofore separate school and public retirement systems are consolidated into a single Utah State Retirement System.

1969

The Utah Public Safety Retirement Act covers all public safety employees engaged full time in hazardous duty. Benefits were uniform in each jurisdiction, but contribution rates varied.

1971

Members gain a salary deferral program.

1975

Current service formula rises from 1.25% to 2%. The cost-of-living ceiling rises to 4%.

1976

Leonard W. McDonald retires. Bert D. Hunsaker becomes executive director.

1977

Governor Scott Matheson dedicates the new Leonard W. McDonald Building for the Utah Retirement Systems.

1979

Board gains custody of the retirement fund and greater investment authority.

1982

The court affirms that the Board is independent of the executive department and has authority to hire its own legal counsel.

1983

The Retirement Board sees its first actuarial surplus as new investments prove their worth; hires a full-time investment manager.

1984

Public Employees Noncontributory Retirement System debuts: employers pay all contributions; 3-year final average salary; State and education employers pay 1.5% of salary into URS' 401(k) Plan. Employees forfeit access to contributions, but the new system portends a superior career retirement.

1987

A "25-and-out" retirement incentive plan permits public employees to retire after 25 years with no actuarial reduction; and increases to 2% the value of each year of service. Over 3,000 employees take advantage of its 6-month window.

A Highlight History 1907-2022 *(Continued)*



1989

The U.S. Supreme Court rules that if federal retirement benefits are taxable, then state-provided retirement benefits cannot be exempt. Legislature grants a 3% substantial substitute benefit for affected members.

Bert Hunsaker steps down. Dee Williams becomes executive director.

The Public Safety Noncontributory Retirement System is created.

The Systems' assets nearly quadruple from \$1 billion to \$3.85 billion during the 1980s.

1990

Public Employees Noncontributory Retirement members receive 2% for all years of service.

1994

URS begins dividing pension, death, and DC benefits after court rules that a former spouse may be awarded death and retirement benefits, whether or not the spouse remarries.

1995

Members with 25 years of service in the Public Employees Noncontributory System may buy future service credit to permit immediate retirement.

1996

URS recovers 100% of member assets originally invested in Guaranteed Investment Contracts that failed when Confederation Life Insurance Company of Canada was declared insolvent in August 1994.

1997

Judges Noncontributory Retirement System is created.

The URS DC video receives a Telly Award — the commercial equivalent of an "Oscar" for motion pictures; URS' publication for retirees, *Cycles*, places second worldwide among corporate and institutional newsletters.

Legislature affirms the Board's authority to define provisions and terms of the retirement code.

1998

The 401(k) Plan launches a bold marketing program to help members better map a retirement investment strategy. Investment options are enhanced and expanded.

State employees at retirement may defer 25% of accumulated sick leave to the 401(k) Plan, convert it to paid-up health or Medicare supplement insurance or take it as cash.

A Highlight History 1907-2022 *(Continued)*

1999

Members may buy up to five years of future service credit, even if it exceeds the years required to retire.

Leonard W. McDonald, director of the Utah Retirement Systems 1952-1976 and to whom much of the structure of the Systems can be attributed, dies.

Dee Williams retires. Robert V. Newman becomes executive director.

Systems' assets rise from \$3.85 billion to over \$13 billion during the 1990s.

2000

401(k) Plan participants may now apply for a fixed rate loan for any purpose of up to 50% of his or her 401(k) account balance.

2001

A value stock fund joins the menu of DC investment options.

URS website calculators invite members to estimate pension benefits and compute potential 401(k)/457(b) earnings.

2002

The Olympic Winter Games are staged in Salt Lake City. URS adopts telecommuting.

457(b) Plan permits deferrals up to 100% of includable compensation; offers a new catch-up feature; drops irrevocable withdrawal decisions; allows rollovers to any acceptant 457(b), 403(b), 401(k), or IRA; allows use for URS pension redeposits or to buy URS service credit.

Internet-based personal retirement account manager, myURS, lets members view and transfer account balances, alter deferrals, estimate payouts, integrate Social Security, and more.

2003

To protect 401(k) and 457(b) investors from the costs of others' adverse trading activities, URS restricts frequent trading privileges. Systems' assets are \$14.2 billion.

2004

Ray L. Lillywhite, executive secretary of the Teachers Retirement System from 1937 to 1952, dies.

2005

Legislature repeals 1998 benefit allowing 25% of a state employee's accumulated sick leave to be converted to other retirement benefits.

2006

Members gain a partial lump-sum payment option (PLSO) at retirement.

2007

Retirement Systems' assets reached \$23.9 billion.

Members of the Public Safety Contributory Retirement System gain a window to convert to the Public Safety Noncontributory System.

2008

The Retirement Systems pay over \$1,000,000,000 in annual benefits.

2009

New online enrollment feature at urs.org offers simple, convenient way to enroll for benefits electronically.

IRS Private Letter Ruling confirms URS 457(b) Plan is an eligible deferred compensation plan as defined in IRC Section 457(b).

2010

Retirees who resume work for a URS employer within a year after retiring will be returned to active status to earn further service credit and may thereafter choose between retirement allowance options.

2011

URS creates the Tier 2 Retirement System for members initially entering full-time employment with a participating employer on or after July 1, 2011. These employees choose to participate in either the Tier 2 Hybrid Retirement System or the Tier 2 Defined Contribution (DC) Plan.

The URS Defined Contribution Department introduces a new and expanded set of asset classes within the Horizon Funds. The changes bring a broader, more diversified mix of securities to the Horizon Funds and offer inflation protection as well as exposure to real estate and commodities.

A Highlight History 1907-2022 *(Continued)*



2012

Legislative bills brought about four noteworthy changes for the Utah Retirement Systems. First, executive director of the Department of Corrections is now allowed to exempt from the Noncontributory Retirement System. Second, Tier 2 firefighters, including volunteers, are covered under the PEHP long-term disability policy. Third, certain Tier 2 Retirement Systems at-will employees are allowed to exempt from the 4-year vesting requirements. And fourth, new legislators and governors will not receive post-retirement health benefits.

2013

Robert V. Newman retires. Daniel D. Andersen becomes executive director.

2014

URS received a No-Action Letter from the Utah Division of Securities in preparation for its new Investment Advice Program to be offered in 2015.

After the close of business on December 31, 2014, all assets held in the DC Plan Horizon Funds were transferred into the new Target Date Funds. The assets were allocated according to the Target Date that corresponded with the participant's age.

2015

URS rolled out its retirement planning advisory program. In 2015, advisors conducted more than 1,600 sessions across the state. In satisfaction surveys, 98% of members were at least satisfied with their session, with 85% giving the highest satisfaction rating.

2016

S.B. 19: establishes an optional "Phased Retirement" program that allows continuing employment on a half-time basis of a retiree with the same participating employer after the retiree's retirement date while the retiree receives 50% of the retiree's monthly retirement allowance. This new program is offered beginning on January 1, 2017.

A Highlight History 1907-2022 *(Continued)*



2017

URS broadened the scope of member education. The “Your Benefits, Your Way” campaign debuted, encouraging members to learn about their benefits in the way that best fits their learning style. Options include publications, videos, live trainings and, new for 2017, regular webinars. The online Message Center debuted, allowing members to send secure messages to URS through their myURS account. URS published targeted editions of the member newsletter *ViewPoint*, tailored to three specific audiences, Tier 1 members, Tier 2 members, and members within their first year of employment. URS continued to increase participation in individual retirement planning sessions. More than 3,700 members attended such sessions in 2017.

2018

The University of Utah’s Kem C. Gardner Policy Institute conducted a study demonstrating how URS pension payments bolstered the Utah economy in 2018. According to the study the economic activity generated by URS pension payments in 2018 supported almost 9,000 Utah jobs, \$360 million in wages, and \$59 million in state and local tax revenue. In 2018, URS paid more than \$1.5 billion in pension benefits to more than 60,000 Utahns, an amount so large, it was equivalent to 1.1 percent of the state’s total personal income.

2019

URS publicly unveiled a major, multiyear project to replace the recordkeeping and information system that runs most of its business operations. AUREUS (Advanced Utah Retirement End User System) will improve processes for members, employers, and URS employees.

2020

Five days after the World Health Organization declared the COVID-19 outbreak a global pandemic, URS closed its Salt Lake City and St. George offices to visitors on March 16. URS adapted to an environment of social distancing and remained fully operational, continuing to provide its full range of customer service. Live member and employer education and URS Board and Membership Counsel meetings were conducted virtually via teleconferencing. By the end of the year, URS offices remained closed to visitors, with most employees telecommuting, and plans for a safe reopening in 2021 in the works.

A Highlight History 1907-2022 *(Concluded)*



2021

Even as pandemic-related social-distancing eased, members and employers continued to benefit from URS's new online and virtual services. Our customers' pandemic-related needs accelerated several initiatives already in the works to allow them to conduct more business with URS online and virtually. Many debuted or were expanded and fine-tuned in 2021. Online or virtual services for members included: retirement applications, IRA contributions, 401(k)/457(b) loan payments, customer service, and retirement estimates. Online or virtual services for employers included: adjustment payment process, virtual trainings, and additional online webinars and videos.

URS rolled out its Financial Wellness Program to all groups. URS members can now get personalized advice from an advisor on topics such as debt management, budgeting, and building emergency savings.

2022

The AUREUS project to replace the recordkeeping and information system that runs most of URS business operations reached the anticipated halfway point. The federal Secure 2.0 Act of 2022 was signed into law on December 29, setting in motion a number of future changes to the administration Defined Contribution plans. URS continued to adapt to meet members' needs and preferences by providing services in person and virtually. The annual employer conference – the URS/PEHP Employer Event – was held in-person for the first time since the pandemic.

GASB 68
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Utah Retirement Systems

Independent Auditor's Report for Agent Plans



To the Utah State Retirement Board
Utah State Retirement Systems
Salt Lake City, Utah

REPORT ON THE AUDIT OF THE SCHEDULE

Opinion

We have audited the fiduciary net position as of December 31, 2022, and the changes in fiduciary net position for the year then ended, including the accompanying Schedule of Changes in Fiduciary Net Position by Employer – Pension Trust Fund by Division (the Schedule) of the Public Safety Retirement System of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, and the related notes to the schedule.

In our opinion, the schedule referred to above presents fairly, in all material respects, the fiduciary net position of the Public Safety Retirement System of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, as of December 31, 2022, and the changes in fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We are required to be independent of Utah Retirement Systems and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Schedule

Management is responsible for the preparation and fair presentation of the schedule in accordance with accounting principles generally accepted in the United States of America; and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of schedule that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities for the Audit of the Schedule

Our objectives are to obtain reasonable assurance about whether the schedule as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

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Independent Auditor's Report for Agent Plans *(Concluded)*

Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the schedule.

In performing an audit in accordance with GAAS, we:

- » Exercise professional judgment and maintain professional skepticism throughout the audit.
- » Identify and assess the risks of material misstatement of the schedule, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the schedule.
- » Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Utah Retirement Systems' internal control. Accordingly, no such opinion is expressed.
- » Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- » Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Utah Retirement Systems' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matters

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which includes the Public Safety Retirement System, as of and for the year ended December 31, 2022, and our report thereon, dated May 31, 2023, expressed an unmodified opinion on those financial statements.

Our audit of the financial statements of Utah Retirement Systems was conducted for the purpose of forming an opinion on the financial statements as a whole. The individual employer information presented in each of the individual columns of the accompanying Schedule is presented for purposes of additional analysis and is not a required part of the financial statements. The individual employer information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Each column of individual employer information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the individual employer information presented in each individual column of the accompanying Schedule is stated fairly, in all material respects, in relation to the financial statements of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which includes the Public Safety Retirement System, as a whole. We do not express an opinion on the fiduciary net position or changes in fiduciary net position of each individual employer.

Restrictions on Use

Our report is intended solely for the information and use of Utah Retirement Systems' management, the Utah State Retirement Board, the participating employers of the Public Safety Retirement System of Utah Retirement Systems and their auditors and is not intended to be and should not be used by anyone other than these specified parties.



Salt Lake City, Utah
May 31, 2023

Public Safety Retirement System

Schedule of Changes in Fiduciary Net Position — Pension Trust Fund by Division

Year Ended December 31, 2022

With Comparative Totals for Year Ended December 31, 2021

(in thousands)

	Salt Lake City	Ogden	Provo
Additions:			
Contributions:			
Member	\$ 89	—	—
Employer	16,506	3,517	2,552
Total contributions	16,595	3,517	2,552
Investment income:			
Net appreciation (depreciation) in fair value of investments	(28,493)	(6,006)	(4,926)
Interest, dividends, and other investment income	7,053	1,500	1,234
Total income (loss) from investment activity	(21,440)	(4,506)	(3,692)
Less investment expenses	1,219	257	211
Net income (loss) from investment activity	(22,659)	(4,763)	(3,903)
Income from security lending activity	51	11	9
Less security lending expense	4	1	1
Net income from security lending activity	47	10	8
Net investment income (loss)	(22,612)	(4,753)	(3,895)
Transfers from (to) affiliated systems	1,538	(248)	624
Total additions	(3,654)	(1,323)	(591)
Deductions:			
Retirement benefits	19,815	4,324	3,329
Cost-of-living benefits	4,812	1,134	741
Supplemental retirement benefits	22	2	3
Refunds	—	—	—
Administrative expenses	134	28	23
Total deductions	24,783	5,488	4,096
Increase (decrease) from operations	(28,437)	(6,811)	(4,687)
Net position restricted for pensions beginning of year	416,079	88,132	71,875
Net position restricted for pensions end of year	\$ 387,642	81,321	67,188

Utah Retirement Systems

Agent Plans		Cost Sharing Plans			Total All Divisions	
Logan	Bountiful	State of Utah Public Safety	Other Division A (with Social Security)	Other Division B (without Social Security)	2022	2021
—	—	80	648	220	1,037	1,421
1,133	1,244	55,857	60,914	26,812	168,535	152,524
1,133	1,244	55,937	61,562	27,032	169,572	153,945
(2,759)	(1,911)	(116,038)	(139,018)	(50,485)	(349,636)	678,975
681	476	28,790	34,528	12,242	86,504	70,131
(2,078)	(1,435)	(87,248)	(104,490)	(38,243)	(263,132)	749,106
118	82	4,965	5,948	2,160	14,960	10,206
(2,196)	(1,517)	(92,213)	(110,438)	(40,403)	(278,092)	738,900
5	3	206	246	89	620	966
—	—	16	20	7	49	94
5	3	190	226	82	571	872
(2,191)	(1,514)	(92,023)	(110,212)	(40,321)	(277,521)	739,772
441	(644)	2,529	(3,817)	4,980	5,403	7,956
(535)	(862)	(30,263)	(48,557)	(6,592)	(92,377)	918,046
1,638	1,212	70,612	73,727	27,017	201,674	196,237
398	331	15,081	14,023	3,445	39,965	37,282
—	—	62	50	—	139	153
—	—	2	550	—	552	32
12	9	494	596	217	1,513	1,466
2,048	1,552	86,251	88,946	30,679	243,843	235,170
(2,583)	(2,414)	(116,514)	(137,503)	(37,271)	(336,220)	682,876
40,104	28,092	1,697,140	2,031,954	732,017	5,105,393	4,422,517
37,521	25,678	1,580,626	1,894,451	694,746	4,769,173	5,105,393

Independent Auditor's Report for Cost Sharing Plans



To the Utah State Retirement Board
Utah State Retirement Systems
Salt Lake City, Utah

REPORT ON THE AUDIT OF THE SCHEDULES

Opinion

We have audited the employer allocations and the total for all entities of the columns titled employer contributions, net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer net pension expense excluding that attributable to employer-paid member contributions (specified column totals) including in the accompanying schedules of employer allocations and pension amounts of the Noncontributory Retirement System, Contributory Retirement System, Firefighters Retirement System, Judges Retirement System, Utah Governors and Legislators Retirement Plan, Tier 2 Public Employees Contributory Retirement System, and Tier 2 Public Safety and Firefighters Contributory Retirement System (Defined Benefit Pension Plans) of Utah Retirement Systems (URS or the System), a component unit of the State of Utah, administered by the Utah State Retirement Board, as of and for the year ended December 31, 2022, and the related notes to the Schedules.

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and the total employer contributions, net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer net pension expense excluding that attributable to employer-paid member contributions for the total of all participating

entities for the Noncontributory Retirement System, Contributory Retirement System, Public Safety Retirement System, Firefighters Retirement System, Judges Retirement System, Utah Governors and Legislators Retirement Plan, Tier 2 Public Employees Contributory Retirement System and Tier 2 Public Safety and Firefighters Contributory Retirement System of URS, a component unit of the State of Utah, administered by the Utah State Retirement board as of and for the year ended December 31, 2022, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Utah Retirement Systems and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of the schedules in accordance with accounting principles generally accepted in the United States of America; and for the design, implementation, and maintenance of internal control relevant to the preparation

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Independent Auditor’s Report for Cost Sharing Plans *(Concluded)*

and fair presentation of schedules that are free from material misstatement, whether due to fraud or error.

Auditor’s Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the schedules as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the schedules.

In performing an audit in accordance with GAAS, we:

- » Exercise professional judgment and maintain professional skepticism throughout the audit.
- » Identify and assess the risks of material misstatement of the schedules, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the schedules.
- » Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Utah Retirement Systems’ internal control. Accordingly, no such opinion is expressed.
- » Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- » Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Utah Retirement Systems’ ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control–related matters that we identified during the audit.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of Utah Retirement Systems, a component unit of the State of Utah, administered by the Utah State Retirement Board, which includes the Defined Benefit Pension Plans, as of and for the year ended December 31, 2022, and our report thereon, dated May 31, 2023, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the Utah Retirement Systems management, the Utah State Retirement Board, the employers of the Defined Benefit Pension Plans of Utah Retirement Systems and their auditors and is not intended to be and should not be used by anyone other than these specified parties.



Salt Lake City, Utah
May 31, 2023

**Noncontributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
4 CORNERS COMM BEHAVIOR HEALTH	\$ 439,199	0.2227974%	\$ 381,596	2,404,946	(1,309,019)	129,432	251,704	62,539
ALPINE CITY	146,203	0.0741661	127,028	800,572	(435,754)	43,086	83,789	20,818
AMERICAN FORK CITY	784,204	0.3978124	681,353	4,294,113	(2,337,299)	231,105	449,427	111,665
ANNABELLA TOWN	13,612	0.0069053	11,827	74,538	(40,571)	4,012	7,801	1,938
ASH CREEK SS DISTRICT	211,739	0.1074112	183,968	1,159,431	(631,082)	62,399	121,347	30,150
ASHLEY VALLEY IMPROV DIST	151,655	0.0769320	131,765	830,428	(452,005)	44,693	86,914	21,595
ASHLEY VALLEY SEWER MGMT BOARD	75,024	0.0380582	65,184	410,812	(223,606)	22,109	42,996	10,683
BALLARD CITY	40,244	0.0204150	34,966	220,366	(119,946)	11,860	23,064	5,730
BEAR LAKE SSD	41,069	0.0208336	35,683	224,884	(122,405)	12,103	23,537	5,848
BEAR RIVER ASSN OF GOVTS	230,216	0.1167843	200,022	1,260,607	(686,152)	67,845	131,937	32,781
BEAR RIVER HEALTH DEPT	886,273	0.4495900	770,035	4,853,017	(2,641,512)	261,184	507,923	126,198
BEAR RIVER MENTAL HEALTH	790,503	0.4010078	686,826	4,328,605	(2,356,073)	232,961	453,037	112,562
BEAR RIVER WATER DISTRICT	41,886	0.0212479	36,392	229,357	(124,839)	12,344	24,005	5,964
BEAVER CITY	190,782	0.0967800	165,760	1,044,674	(568,619)	56,223	109,337	27,166
BEAVER COUNTY	364,828	0.1850704	316,979	1,997,709	(1,087,359)	107,515	209,083	51,949
BEAVER HOUSING AUTHORITY	27,315	0.0138563	23,732	149,569	(81,411)	8,050	15,654	3,889
BEAVER VALLEY HOSPITAL	947,137	0.4804652	822,916	5,186,294	(2,822,915)	279,121	542,804	134,865
BENCHLAND WATER COMPANY	68,877	0.0349400	59,843	377,153	(205,286)	20,298	39,473	9,808
BICKNELL TOWN	6,883	0.0034916	5,980	37,689	(20,514)	2,028	3,945	980
BIG COTTONWOOD CANYON IMP DIST	4,007	0.0020326	3,481	21,941	(11,942)	1,181	2,296	571
BIG PLAINS WATER & SEWER SSD	10,015	0.0050805	8,702	54,841	(29,850)	2,951	5,740	1,426
BLANDING CITY	147,908	0.0750312	128,510	809,911	(440,837)	43,589	84,766	21,061
BLUFFDALE CITY	338,419	0.1716738	294,034	1,853,101	(1,008,649)	99,732	193,948	48,188
BONA VISTA WATER IMPROVE	94,281	0.0478272	81,916	516,262	(281,003)	27,785	54,033	13,425
BOUNTIFUL IRRIGATION DISTRICT	78,712	0.0399293	68,389	431,010	(234,600)	23,196	45,110	11,208
BOX ELDER CO MOSQ DIST	49,869	0.0252979	43,329	273,074	(148,635)	14,697	28,580	7,101
BOX ELDER COUNTY	1,015,837	0.5153155	882,606	5,562,479	(3,027,674)	299,367	582,176	144,647
BRIGHAM CITY	769,373	0.3902889	668,467	4,212,902	(2,293,095)	226,734	440,927	109,553
BRYCE CANYON CITY	2,743	0.0013914	2,383	15,019	(8,175)	808	1,572	391
CACHE COUNTY	1,350,693	0.6851816	1,173,544	7,396,068	(4,025,702)	398,049	774,081	192,328
CACHE METRO PLANNING ORG	18,910	0.0095926	16,430	103,546	(56,360)	5,573	10,837	2,693
CACHE WATER DISTRICT	4,564	0.0023152	3,965	24,991	(13,603)	1,345	2,616	650
CARBON COUNTY	572,527	0.2904324	497,438	3,135,019	(1,706,401)	168,724	328,115	81,523
CARBON COUNTY REC/TRANS SSD	46	0.0000233	40	252	(137)	14	26	7
CASTLE DALE CITY	13,957	0.0070799	12,126	76,423	(41,597)	4,113	7,998	1,987
CASTLE VALLEY SSD	87,212	0.0442409	75,774	477,550	(259,932)	25,701	49,981	12,418
CEDAR CITY	960,401	0.4871937	834,440	5,258,923	(2,862,448)	283,030	550,405	136,754
CEDAR CITY HOUSING AUTH	42,702	0.0216620	37,102	233,827	(127,272)	12,584	24,473	6,080
CEDAR MTN FIRE PROTECTION DIST	5,120	0.0025974	4,449	28,037	(15,261)	1,509	2,934	729
CENTERFIELD CITY	14,818	0.0075170	12,875	81,141	(44,165)	4,367	8,492	2,110
CENTERVILLE CITY	370,233	0.1878122	321,675	2,027,304	(1,103,468)	109,107	212,180	52,718
CENTRAL DAVIS SEWER DIST	189,472	0.0961156	164,622	1,037,502	(564,716)	55,837	108,586	26,979
CENTRAL IRON CO WATER CONSERV	29,636	0.0150339	25,749	162,281	(88,330)	8,734	16,984	4,220
CENTRAL UT PUBLIC HEALTH	261,194	0.1324989	226,937	1,430,235	(778,481)	76,974	149,690	37,192
CENTRAL UTAH 911	370,868	0.1881343	322,227	2,030,781	(1,105,360)	109,295	212,544	52,809
CENTRAL UTAH COUNSELING CENTER	549,839	0.2789233	477,726	3,010,787	(1,638,780)	162,037	315,113	78,293
CENTRAL UTAH WATER DIST	1,454,861	0.7380241	1,264,050	7,966,466	(4,336,172)	428,747	833,780	207,161
CENTRAL VALLEY TOWN	9,907	0.0050255	8,607	54,247	(29,527)	2,920	5,678	1,411
CENTRAL WASATCH COMMISSION	17,328	0.0087903	15,056	94,885	(51,646)	5,107	9,931	2,467
CENTRAL WEBER SEWER DIST	311,821	0.1581809	270,924	1,707,455	(929,373)	91,893	178,704	44,401
CITY OF AURORA	8,417	0.0042697	7,313	46,088	(25,086)	2,480	4,824	1,198
CITY OF BOUNTIFUL	1,448,837	0.7349684	1,258,816	7,933,482	(4,318,218)	426,972	830,328	206,303
CITY OF CEDAR HILLS	225,829	0.1145589	196,211	1,236,585	(673,077)	66,552	129,422	32,156
CITY OF DRAPER	1,254,162	0.6362133	1,089,674	6,867,488	(3,737,995)	369,601	718,759	178,583
CITY OF DUCHESNE	32,289	0.0163796	28,054	176,807	(96,236)	9,516	18,505	4,598

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
14,884	458,559	—	—	1,524	6,498	8,022	179,525	(23,554)	—	155,971
335	148,028	—	—	507	3,200	3,707	59,761	(4,543)	—	55,218
—	792,197	—	—	2,721	22,757	25,478	320,548	(27,915)	—	292,633
—	13,751	—	—	47	1,100	1,147	5,564	(3,043)	—	2,521
5,917	219,813	—	—	735	3,078	3,813	86,549	4,363	—	90,912
7,171	160,373	—	—	526	3,043	3,569	61,990	(10,512)	—	51,478
278	76,066	—	—	260	2,002	2,262	30,666	(1,105)	—	29,561
1,224	41,878	—	—	140	26	166	16,450	1,379	—	17,829
2,658	44,146	—	—	142	—	142	16,787	6,099	—	22,886
15,572	248,135	—	—	799	3,066	3,865	94,102	3,263	—	97,365
58,991	954,296	—	—	3,075	7,786	10,861	362,269	34,999	—	397,268
73,513	872,073	—	—	2,743	1,904	4,647	323,123	43,399	—	366,522
2,619	44,932	—	—	145	—	145	17,121	1,312	—	18,433
1,985	194,711	—	—	662	1,612	2,274	77,983	(435)	—	77,548
10,780	379,327	—	—	1,266	1,123	2,389	149,126	(3,136)	—	145,990
2,495	30,088	—	—	95	—	95	11,165	3,495	—	14,660
43,566	1,000,356	—	—	3,286	—	3,286	387,148	57,072	—	444,220
817	70,396	—	—	239	3,048	3,287	28,154	(2,094)	—	26,060
274	7,227	—	—	24	37	61	2,813	39	—	2,852
45	4,093	—	—	14	622	636	1,638	(4,290)	—	(2,652)
1,070	11,187	—	—	35	191	226	4,094	1,580	—	5,674
—	149,416	—	—	513	5,363	5,876	60,458	(8,916)	—	51,542
25,399	367,267	—	—	1,174	366	1,540	138,331	22,979	—	161,310
6,820	102,063	—	—	327	—	327	38,538	4,941	—	43,479
1,131	80,645	—	—	273	801	1,074	32,174	(6,439)	—	25,735
145	50,523	—	—	173	176	349	20,384	792	—	21,176
64,171	1,090,361	—	—	3,524	—	3,524	415,229	48,193	—	463,422
2,342	779,556	—	—	2,669	11,239	13,908	314,486	(33,702)	—	280,784
809	3,580	—	—	10	—	10	1,121	434	—	1,555
62,276	1,426,734	—	—	4,686	—	4,686	552,104	46,407	—	598,511
660	19,763	—	—	66	9	75	7,729	434	—	8,163
856	5,467	—	—	16	77	93	1,866	3,718	—	5,584
—	578,362	—	—	1,986	42,164	44,150	234,024	(79,188)	—	154,836
1	48	—	—	—	3,862	3,862	19	(6,326)	—	(6,307)
—	14,098	—	—	48	2,410	2,458	5,705	(5,380)	—	325
1,562	89,662	—	—	303	1,084	1,387	35,648	2,220	—	37,868
62,564	1,032,753	—	—	3,332	—	3,332	392,570	51,648	—	444,218
3,429	46,566	—	—	148	—	148	17,455	4,012	—	21,467
3,568	8,740	—	—	18	1,585	1,603	2,093	2,786	—	4,879
958	15,927	—	—	51	876	927	6,057	(362)	—	5,695
13,102	387,107	—	—	1,284	299	1,583	151,335	7,491	—	158,826
705	192,107	—	—	657	3,214	3,871	77,448	1,514	—	78,962
311	30,249	—	—	103	649	752	12,114	(793)	—	11,321
19	263,875	—	—	906	10,827	11,733	106,765	(12,501)	—	94,264
15,428	390,076	—	—	1,287	340	1,627	151,594	38,272	—	189,866
34,272	589,715	—	—	1,908	2,878	4,786	224,750	5,169	—	229,919
13,736	1,483,424	—	—	5,047	28,400	33,447	594,683	46,868	—	641,551
2,517	12,526	—	—	34	1,425	1,459	4,049	6,320	—	10,369
170	17,675	—	—	60	1,586	1,646	7,083	3,600	—	10,683
2,256	317,254	—	—	1,082	1,369	2,451	127,459	(3)	—	127,456
1,129	9,631	—	—	29	3,114	3,143	3,440	1,115	—	4,555
—	1,463,603	—	—	5,027	39,040	44,067	592,221	(46,090)	—	546,131
15,806	243,936	—	—	783	—	783	92,309	8,743	—	101,052
31,066	1,298,009	—	—	4,351	11,158	15,509	512,646	(14,734)	—	497,912
1,188	33,807	—	—	112	4,308	4,420	13,198	(10,087)	—	3,111

**Noncontributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
CITY OF ENTERPRISE	\$ 84,031	0.0426275%	\$ 73,010	460,135	(250,453)	24,764	48,158	11,965
CITY OF GREEN RIVER	60,389	0.0306341	52,469	330,674	(179,987)	17,797	34,609	8,599
CITY OF HARRISVILLE	117,607	0.0596600	102,183	643,989	(350,525)	34,659	67,401	16,746
CITY OF HELPER	35,922	0.0182224	31,210	196,698	(107,064)	10,586	20,587	5,115
CITY OF HOLLADAY	218,309	0.1107441	189,677	1,195,407	(650,664)	64,336	125,113	31,086
CITY OF KANAB	112,042	0.0568369	97,347	613,516	(333,938)	33,019	64,211	15,954
CITY OF MILFORD	51,947	0.0263520	45,134	284,452	(154,828)	15,309	29,771	7,397
CITY OF MOAB	495,027	0.2511179	430,102	2,710,646	(1,475,413)	145,884	283,699	70,488
CITY OF MONTICELLO	58,133	0.0294899	50,509	318,323	(173,264)	17,132	33,316	8,278
CITY OF NAPLES	59,956	0.0304145	52,092	328,304	(178,697)	17,669	34,361	8,537
CITY OF NORTH SALT LAKE	518,705	0.2631296	450,675	2,840,304	(1,545,986)	152,862	297,270	73,860
CITY OF OREM	2,204,909	1.1185100	1,915,727	12,073,552	(6,571,671)	649,786	1,263,632	313,962
CITY OF RIVERTON	976,824	0.4955248	848,710	5,348,852	(2,911,396)	287,870	559,817	139,092
CITY OF SANTA CLARA	298,281	0.1513124	259,160	1,633,314	(889,018)	87,903	170,945	42,473
CITY OF SARATOGA SPRINGS	811,603	0.4117115	705,158	4,444,145	(2,418,961)	239,179	465,129	115,566
CITY OF SOUTH JORDAN	2,147,622	1.0894493	1,865,953	11,759,861	(6,400,928)	632,904	1,230,801	305,805
CITY OF SOUTH SALT LAKE	1,042,802	0.5289942	906,034	5,710,131	(3,108,042)	307,313	597,629	148,487
CITY OF ST GEORGE	4,351,722	2.2075488	3,780,977	23,828,982	(12,970,187)	1,282,451	2,493,970	619,652
CITY OF TAYLORSVILLE	486,597	0.2468419	422,778	2,664,490	(1,450,290)	143,400	278,869	69,288
CITY OF UINTAH	21,025	0.0106654	18,267	115,126	(62,663)	6,196	12,049	2,994
CITY OF WASHINGTON TERRACE	160,406	0.0813711	139,368	878,345	(478,086)	47,272	91,929	22,841
CITY OF WENDOVER	34,046	0.0172710	29,581	186,429	(101,474)	10,033	19,512	4,848
CITY OF WEST HAVEN	168,171	0.0853103	146,115	920,866	(501,230)	49,560	96,379	23,946
CITY OF WEST JORDAN	2,342,924	1.1885222	2,035,640	12,829,286	(6,983,019)	690,459	1,342,728	333,614
CITY OF WOODLAND HILLS	59,476	0.0301712	51,676	325,678	(177,267)	17,528	34,086	8,469
CLEARFIELD CITY	713,417	0.3619035	619,850	3,906,501	(2,126,320)	210,244	408,859	101,585
CLEVELAND TOWN	2,117	0.0010737	1,839	11,590	(6,308)	624	1,213	301
CLINTON CITY	333,919	0.1693910	290,124	1,828,460	(995,236)	98,406	191,369	47,548
COALVILLE CITY	62,105	0.0315048	53,960	340,073	(185,103)	18,302	35,592	8,843
COTTONWOOD HEIGHTS CITY	321,616	0.1631498	279,435	1,761,091	(958,567)	94,780	184,318	45,796
COTTONWOOD HEIGHTS P&R SRV	164,138	0.0832640	142,610	898,778	(489,208)	48,371	94,067	23,372
COTTONWOOD IMP DISTRICT	311,131	0.1578312	270,325	1,703,680	(927,318)	91,690	178,309	44,303
COUNCIL ON AGING GOLDEN AGE SS	25,305	0.0128368	21,986	138,564	(75,421)	7,457	14,502	3,603
DAGGETT COUNTY	116,469	0.0590825	101,193	637,755	(347,132)	34,323	66,748	16,584
DAVIS BEHAVIORAL HEALTH INC	1,845,563	0.9362202	1,603,510	10,105,858	(5,500,649)	543,887	1,057,691	262,794
DAVIS CO HOUSING AUTHORITY	69,994	0.0355065	60,814	383,268	(208,614)	20,627	40,113	9,967
DAVIS CO MOSQUITO ABATE	56,575	0.0286995	49,155	309,792	(168,620)	16,673	32,423	8,056
DAVIS COUNTY	5,309,613	2.6934691	4,613,236	29,074,160	(15,825,153)	1,564,741	3,042,936	756,048
DELTA CITY	98,590	0.0500129	85,660	539,855	(293,845)	29,054	56,502	14,038
DUCHESNE CO WATER CONSERV DIST	32,648	0.0165618	28,366	178,773	(97,307)	9,621	18,711	4,649
DUCHESNE COUNTY	590,569	0.2995850	513,114	3,233,816	(1,760,176)	174,041	338,455	84,093
E DUCHESNE CUL WATER IMP DIST	14,430	0.0073202	12,538	79,017	(43,009)	4,253	8,270	2,055
EAGLE MOUNTAIN CITY	664,004	0.3368370	576,917	3,635,925	(1,979,045)	195,682	380,540	94,549
EAST CARBON CITY	34,931	0.0177200	30,350	191,275	(104,112)	10,294	20,019	4,974
ELK RIDGE CITY	26,565	0.0134758	23,081	145,462	(79,175)	7,829	15,224	3,783
ELWOOD TOWN	7,271	0.0036883	6,317	39,813	(21,670)	2,143	4,167	1,035
EMERY COUNTY	490,911	0.2490300	426,526	2,688,109	(1,463,146)	144,671	281,341	69,902
EMERY COUNTY RECREATION SSD	2,938	0.0014906	2,553	16,090	(8,758)	866	1,684	418
EMERY WATER CONSERV DIST	52,544	0.0266547	45,653	287,719	(156,606)	15,485	30,113	7,482
ENOCH CITY	93,852	0.0476092	81,543	513,909	(279,722)	27,658	53,786	13,364
EPHRAIM CITY	221,680	0.1124542	192,606	1,213,866	(660,711)	65,329	127,045	31,566
ESCALANTE CITY	35,101	0.0178063	30,498	192,207	(104,619)	10,344	20,117	4,998
EUREKA CITY CORPORATION	16,767	0.0085056	14,568	91,812	(49,974)	4,941	9,609	2,387
FAIRVIEW CITY	54,478	0.0276356	47,333	298,307	(162,370)	16,055	31,221	7,757
FARMINGTON CITY	461,272	0.2339896	400,765	2,525,758	(1,374,778)	135,934	264,349	65,680
FARR WEST CITY	85,924	0.0435875	74,654	470,497	(256,093)	25,322	49,243	12,235
FERRON CITY	19,900	0.0100949	17,290	108,968	(59,311)	5,865	11,405	2,834
FILLMORE CITY	70,492	0.0357592	61,247	385,996	(210,099)	20,774	40,399	10,037
FIVE-COUNTY ASSN OF GOVTS	335,782	0.1703359	291,743	1,838,660	(1,000,788)	98,955	192,436	47,813
FOUNTAIN GREEN CITY	20,008	0.0101496	17,384	109,558	(59,633)	5,896	11,466	2,849

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
2,191	87,078	—	—	292	—	292	34,348	4,008	—	38,356
1,004	62,009	—	—	210	4,215	4,425	24,684	(5,159)	—	19,525
9,543	128,349	—	—	408	2,676	3,084	48,073	(7,296)	—	40,777
—	36,288	—	—	125	3,359	3,484	14,683	(5,067)	—	9,616
21,050	241,585	—	—	757	5,413	6,170	89,235	14,256	—	103,491
8,659	121,843	—	—	389	531	920	45,798	1,579	—	47,377
51	52,528	—	—	180	559	739	21,234	(23)	—	21,211
287	500,358	—	—	1,717	50,245	51,962	202,345	(76,426)	—	125,919
1,519	60,245	—	—	202	12,236	12,438	23,762	(8,918)	—	14,844
3,567	64,134	—	—	208	8,432	8,640	24,507	(11,329)	—	13,178
6,212	530,204	—	—	1,800	—	1,800	212,024	11,054	—	223,078
—	2,227,380	—	—	7,650	23,233	30,883	901,270	(40,433)	—	860,837
2,180	988,959	—	—	3,389	19,718	23,107	399,283	(2,965)	—	396,318
2,219	303,540	—	—	1,035	439	1,474	121,924	(2,958)	—	118,966
80,569	900,443	—	—	2,816	—	2,816	331,748	88,816	—	420,564
41,673	2,211,183	—	—	7,451	768	8,219	877,853	38,232	—	916,085
41,079	1,094,508	—	—	3,618	—	3,618	426,251	33,008	—	459,259
14,661	4,410,734	—	—	15,098	5,842	20,940	1,778,792	20,105	—	1,798,897
50,442	541,999	—	—	1,688	—	1,688	198,900	64,193	—	263,093
1,305	22,544	—	—	73	2,388	2,461	8,594	1,933	—	10,527
3,595	165,637	—	—	557	4,270	4,827	65,567	(17,289)	—	48,278
706	35,099	—	—	118	2,218	2,336	13,917	(4,422)	—	9,495
17,658	187,543	—	—	583	—	583	68,741	19,826	—	88,567
41,519	2,408,320	—	—	8,128	104,264	112,392	957,684	(163,164)	—	794,520
7,007	67,090	—	—	206	1,807	2,013	24,311	8,944	—	33,255
30,911	751,599	—	—	2,475	—	2,475	291,614	23,506	—	315,120
212	2,350	—	—	7	355	362	865	(157)	—	708
1,316	338,639	—	—	1,158	1,987	3,145	136,491	1,633	—	138,124
2,714	65,451	—	—	215	—	215	25,386	4,655	—	30,041
3,962	328,856	—	—	1,116	9,871	10,987	131,462	(121)	—	131,341
1,168	166,978	—	—	569	8,520	9,089	67,092	2,032	—	69,124
—	314,302	—	—	1,079	18,785	19,864	127,177	(27,159)	—	100,018
1,381	26,943	—	—	88	13,010	13,098	10,344	(18,219)	—	(7,875)
3,216	120,871	—	—	404	2,862	3,266	47,607	8,409	—	56,016
127,322	1,991,694	—	—	6,403	—	6,403	754,385	146,737	—	901,122
4,400	75,107	—	—	243	1,948	2,191	28,610	5,857	—	34,467
2,393	59,545	—	—	196	—	196	23,125	2,274	—	25,399
42,888	5,406,613	—	—	18,421	40,458	58,879	2,170,336	153,268	—	2,323,604
743	100,337	—	—	342	1,832	2,174	40,299	(2,604)	—	37,695
445	33,426	—	—	113	2,871	2,984	13,345	(6,905)	—	6,440
3,374	599,963	—	—	2,049	42,033	44,082	241,399	(11,849)	—	229,550
130	14,708	—	—	50	—	50	5,898	533	—	6,431
45,807	716,578	—	—	2,304	—	2,304	271,416	48,916	—	320,332
7	35,294	—	—	121	2,742	2,863	14,278	(2,424)	—	11,854
4,336	31,172	—	—	92	4,964	5,056	10,858	5,375	—	16,233
3,056	10,401	—	—	25	—	25	2,972	5,005	—	7,977
1,257	497,171	—	—	1,703	2,483	4,186	200,663	(2,965)	—	197,698
30	2,998	—	—	10	143	153	1,201	(80)	—	1,121
2,078	55,158	—	—	182	—	182	21,478	544	—	22,022
6,934	101,742	—	—	326	619	945	38,362	3,869	—	42,231
699	224,639	—	—	769	6,828	7,597	90,613	4,940	—	95,553
390	35,849	—	—	122	2,226	2,348	14,348	936	—	15,284
473	17,410	—	—	58	430	488	6,854	897	—	7,751
3,034	58,067	—	—	189	—	189	22,268	3,313	—	25,581
1,366	467,329	—	—	1,600	11,205	12,805	188,543	(10,988)	—	177,555
1,646	88,446	—	—	298	4	302	35,122	2,866	—	37,988
243	20,347	—	—	69	329	398	8,134	(681)	—	7,453
1,160	72,370	—	—	245	2,533	2,778	28,814	(77)	—	28,737
17,625	356,829	—	—	1,165	1,881	3,046	137,253	5,664	—	142,917
607	20,818	—	—	69	124	193	8,178	28	—	8,206

**Noncontributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts (Continued)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions
FOX HOLLOW GOLF COURSE	\$ 25,784	0.0130795%	\$ 22,402	141,184	(76,847)	7,598	14,777	3,671
FRANCIS CITY	34,325	0.0174125	29,823	187,956	(102,305)	10,116	19,672	4,888
FRUIT HEIGHTS CITY	76,401	0.0387567	66,380	418,352	(227,710)	22,515	43,785	10,879
GARFIELD COUNTY	332,537	0.1686899	288,923	1,820,892	(991,117)	97,999	190,577	47,351
GENOLA TOWN	23,053	0.0116944	20,030	126,233	(68,709)	6,794	13,212	3,283
GRAND COUNTY	891,758	0.4523724	774,800	4,883,051	(2,657,860)	262,801	511,066	126,979
GRAND COUNTY EMS SSD	79,236	0.0401950	68,844	433,878	(236,161)	23,351	45,410	11,283
GRAND WATER/SEWER SERVICE	57,194	0.0290135	49,693	313,181	(170,465)	16,855	32,778	8,144
GRANGER-HUNTER IMP DIST	667,282	0.3384998	579,765	3,653,874	(1,988,815)	196,648	382,419	95,016
GRANTSVILLE CITY	252,173	0.1279229	219,100	1,380,840	(751,596)	74,315	144,520	35,908
GREATER SALT LAKE MUNICIPAL SD	361,001	0.1831294	313,655	1,976,757	(1,075,955)	106,387	206,890	51,404
GUNNISON CITY	56,805	0.0288160	49,355	311,049	(169,305)	16,740	32,555	8,089
GUNNISON VALLEY HOSPITAL	1,187,012	0.6021494	1,031,331	6,499,792	(3,537,856)	349,812	680,276	169,021
GUNNISON VALLEY POLICE DEPT	7,673	0.0038926	6,667	42,018	(22,871)	2,261	4,398	1,093
HEBER CITY	547,946	0.2779631	476,081	3,000,422	(1,633,139)	161,480	314,028	78,023
HEBER LIGHT & POWER	568,649	0.2884651	494,068	3,113,784	(1,694,842)	167,581	325,892	80,971
HEBER VALLEY SSD	42,409	0.0215134	36,847	232,222	(126,399)	12,498	24,305	6,039
HERRIMAN CITY	1,090,614	0.5532487	947,576	5,971,942	(3,250,546)	321,404	625,031	155,295
HIGH VALLEY TRANSIT DISTRICT	2,434	0.0012347	2,115	13,328	(7,254)	717	1,395	347
HIGHLAND CITY	266,951	0.1354191	231,939	1,461,757	(795,639)	78,670	152,989	38,012
HINCKLEY TOWN	14,869	0.0075430	12,919	81,422	(44,318)	4,382	8,522	2,117
HOOPER CITY	45,128	0.0228926	39,209	247,110	(134,503)	13,299	25,863	6,426
HOOPER WATER IMPROV DIST	112,991	0.0573184	98,172	618,713	(336,767)	33,298	64,755	16,089
HOUSING AUTH OF CARBON CO	54,505	0.0276492	47,356	298,454	(162,450)	16,062	31,237	7,761
HOUSING AUTHORITY OF SLC	519,695	0.2636319	451,535	2,845,726	(1,548,937)	153,154	297,837	74,001
HOUSING AUTHORITY OGDEN CITY	141,679	0.0718710	123,097	775,798	(422,269)	41,753	81,196	20,174
HOUSING CONNECT	566,426	0.2873377	492,137	3,101,614	(1,688,218)	166,926	324,619	80,655
HUNTINGTON CITY	33,015	0.0167481	28,685	180,784	(98,401)	9,730	18,921	4,701
HURRICANE CITY	641,727	0.3255364	557,562	3,513,943	(1,912,650)	189,117	367,773	91,377
HURRICANE VALLEY FIRE SSD	57,507	0.0291721	49,964	314,893	(171,397)	16,947	32,957	8,189
HYDE PARK CITY	109,843	0.0557215	95,437	601,476	(327,385)	32,371	62,951	15,641
HYRUM CITY	316,847	0.1607308	275,291	1,734,979	(944,354)	93,375	181,585	45,117
IMPACT MITIGATION SSD	15,403	0.0078136	13,383	84,342	(45,908)	4,539	8,827	2,193
IRON COUNTY	784,605	0.3980157	681,701	4,296,308	(2,338,493)	231,223	449,657	111,722
IVINS CITY	275,608	0.1398110	239,461	1,509,164	(821,443)	81,222	157,951	39,245
JORDAN RIVER COMMISSION	27,209	0.0138026	23,640	148,990	(81,096)	8,018	15,593	3,874
JORDAN VALLEY WATER CONSERV	1,539,890	0.7811578	1,337,927	8,432,065	(4,589,599)	453,805	882,510	219,269
JORDANELLE SSD	345,405	0.1752178	300,104	1,891,357	(1,029,471)	101,791	197,952	49,183
JUAB COUNTY	394,539	0.2001424	342,794	2,160,401	(1,175,913)	116,271	226,110	56,179
JUAB SPECIAL SERVICE FIRE DIST	16,236	0.0082364	14,107	88,906	(48,392)	4,785	9,305	2,312
KAMAS CITY	47,362	0.0240258	41,150	259,342	(141,161)	13,958	27,143	6,744
KANE COUNTY	503,758	0.2555473	437,688	2,758,459	(1,501,437)	148,457	288,704	71,731
KANE COUNTY WATER CONSERV DIST	99,158	0.0503010	86,153	542,965	(295,537)	29,222	56,827	14,119
KANOSH TOWN CORPORATION	4,436	0.0022505	3,855	24,293	(13,223)	1,307	2,542	632
KAYSVILLE CITY	779,094	0.3952201	676,913	4,266,131	(2,322,068)	229,599	446,498	110,937
KEARNS IMPROVEMENT DIST	321,961	0.1633251	279,735	1,762,983	(959,597)	94,882	184,516	45,845
LAVERKIN CITY	116,013	0.0588511	100,797	635,257	(345,773)	34,189	66,487	16,519
LAYTON CITY	1,303,233	0.6611063	1,132,309	7,136,191	(3,884,250)	384,062	746,882	185,570
LEHI CITY	1,925,125	0.9765806	1,672,637	10,541,521	(5,737,782)	567,334	1,103,288	274,123
LEWISTON CITY	30,550	0.0154973	26,543	167,283	(91,053)	9,003	17,508	4,350
LINDON CITY	421,701	0.2139210	366,393	2,309,131	(1,256,867)	124,275	241,676	60,047
LOGAN CITY	2,428,150	1.2317561	2,109,689	13,295,966	(7,237,035)	715,575	1,391,572	345,750
LONE PEAK PS DISTRICT	31,354	0.0159051	27,241	171,685	(93,448)	9,240	17,969	4,465
MAESER WATER IMPROVE DIST	67,420	0.0342008	58,577	369,174	(200,943)	19,869	38,638	9,600
MAGNA MOSQUITO ABATEMENT	24,161	0.0122566	20,992	132,302	(72,012)	7,120	13,847	3,440
MANTI CITY	88,046	0.0446643	76,499	482,121	(262,420)	25,947	50,459	12,537
MAPLETON CITY	302,669	0.1535384	262,973	1,657,342	(902,096)	89,196	173,459	43,098
MARRIOTT-SLATERVILLE CITY	55,559	0.0281839	48,272	304,226	(165,591)	16,373	31,841	7,911
MAYFIELD TOWN	7,267	0.0036865	6,314	39,793	(21,660)	2,142	4,165	1,035
MENDON CITY	10,208	0.0051784	8,869	55,897	(30,425)	3,008	5,850	1,454

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
102	26,148	—	—	89	3,188	3,277	10,539	(3,890)	—	6,649
3,034	37,710	—	—	119	1,978	2,097	14,031	4,804	—	18,835
6,778	83,957	—	—	265	1,793	2,058	31,229	(5,304)	—	25,925
5,840	341,767	—	—	1,154	8,632	9,786	135,926	(3,145)	—	132,781
950	24,239	—	—	80	—	80	9,423	1,258	—	10,681
39,310	940,156	—	—	3,094	6,622	9,716	364,511	(14,453)	—	350,058
10,211	90,255	—	—	275	—	275	32,388	29,441	—	61,829
2,191	59,968	—	—	198	1,802	2,000	23,378	6,552	—	29,930
7,065	681,148	—	—	2,315	33,826	36,141	272,755	(66,516)	—	206,239
30,902	285,645	—	—	875	—	875	103,077	28,943	—	132,020
55,655	420,336	—	—	1,252	9,290	10,542	147,561	249,525	—	397,086
4,573	61,957	—	—	197	2,319	2,516	23,219	(4,146)	—	19,073
93,689	1,292,798	—	—	4,118	9,244	13,362	485,198	38,879	—	524,077
235	7,987	—	—	27	1,534	1,561	3,137	(2,245)	—	892
22,541	576,072	—	—	1,901	—	1,901	223,976	58,507	—	282,483
7,686	582,130	—	—	1,973	1,827	3,800	232,439	(11,375)	—	221,064
685	43,527	—	—	147	310	457	17,335	1,893	—	19,228
11,316	1,113,046	—	—	3,784	21,320	25,104	445,795	51,949	—	497,744
718	3,177	—	—	8	—	8	995	386	—	1,381
18,767	288,438	—	—	926	2,243	3,169	109,118	4,243	—	113,361
1,752	16,773	—	—	52	269	321	6,078	496	—	6,574
271	45,859	—	—	157	7,405	7,562	18,446	(6,675)	—	11,771
3,333	117,475	—	—	392	44	436	46,186	5,240	—	51,426
1,538	56,598	—	—	189	1,638	1,827	22,279	5,192	—	27,471
—	524,992	—	—	1,803	41,217	43,020	212,429	(46,417)	—	166,012
6,447	149,570	—	—	492	324	816	57,912	4,983	—	62,895
4,452	576,652	—	—	1,965	26,807	28,772	231,530	(586)	—	230,944
—	33,352	—	—	115	689	804	13,495	(925)	—	12,570
2,432	650,699	—	—	2,226	36,409	38,635	262,310	(31,579)	—	230,731
18,325	76,418	—	—	200	—	200	23,506	15,571	—	39,077
4,150	115,113	—	—	381	—	381	44,899	2,037	—	46,936
9,226	329,303	—	—	1,099	59	1,158	129,513	31,522	—	161,035
—	15,559	—	—	53	2,223	2,276	6,296	(1,219)	—	5,077
8,490	801,092	—	—	2,722	26,561	29,283	320,712	(51,330)	—	269,382
7,954	286,372	—	—	956	—	956	112,657	1,272	—	113,929
488	27,973	—	—	94	163	257	11,122	3,805	—	14,927
9,342	1,564,926	—	—	5,342	9,166	14,508	629,439	(71,364)	—	558,075
19,496	368,422	—	—	1,198	—	1,198	141,187	32,289	—	173,476
21,988	420,548	—	—	1,369	—	1,369	161,270	11,340	—	172,610
1,630	18,032	—	—	56	—	56	6,637	6,118	—	12,755
986	48,831	—	—	164	379	543	19,359	1,332	—	20,691
11,462	520,354	—	—	1,748	33,125	34,873	205,914	(24,648)	—	181,266
9,590	109,758	—	—	344	—	344	40,531	10,596	—	51,127
2,054	6,535	—	—	15	—	15	1,813	1,612	—	3,425
4,095	791,129	—	—	2,703	745	3,448	318,459	20,827	—	339,286
9,081	334,324	—	—	1,117	5,705	6,822	131,604	(22,629)	—	108,975
1,810	119,005	—	—	402	1,935	2,337	47,421	1,440	—	48,861
—	1,316,514	—	—	4,521	18,524	23,045	532,704	(30,563)	—	502,141
10,073	1,954,818	—	—	6,679	4,116	10,795	786,906	40,149	—	827,055
244	31,105	—	—	106	4,684	4,790	12,487	(3,609)	—	8,878
10,509	436,507	—	—	1,463	—	1,463	172,373	9,633	—	182,006
2,917	2,455,814	—	—	8,424	41,739	50,163	992,521	(38,544)	—	953,977
209	31,883	—	—	109	8,537	8,646	12,816	(5,661)	—	7,155
466	68,573	—	—	234	993	1,227	27,558	115	—	27,673
690	25,097	—	—	84	—	84	9,876	1,116	—	10,992
426	89,369	—	—	305	5,475	5,780	35,989	(3,053)	—	32,936
17,178	322,931	—	—	1,050	407	1,457	123,718	13,243	—	136,961
1,921	58,046	—	—	193	—	193	22,710	7,014	—	29,724
—	7,342	—	—	25	698	723	2,970	(1,439)	—	1,531
4	10,316	—	—	35	5	40	4,173	(513)	—	3,660

**Noncontributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions
METRO WATER DIST SLC/SANDY	\$ 873,530	0.4431258%	\$ 758,963	4,783,240	(2,603,532)	257,429	500,620	124,384
MIDVALE CITY	686,817	0.3484096	596,738	3,760,844	(2,047,039)	202,405	393,614	97,797
MIDVALLEY IMPROVEMENT DISTRICT	125,240	0.0635322	108,815	685,787	(373,276)	36,908	71,775	17,833
MIDWAY CITY	180,311	0.0914683	156,662	987,338	(537,411)	53,138	103,336	25,675
MILITARY INSTALLATION DEVEL	64,908	0.0329267	56,395	355,421	(193,457)	19,128	37,199	9,242
MILLARD CO CARE & REHAB INC	246,999	0.1252983	214,605	1,352,510	(736,175)	72,791	141,555	35,171
MILLARD COUNTY	720,526	0.3655094	626,026	3,945,424	(2,147,506)	212,339	412,933	102,597
MILLCREEK CITY	431,473	0.2188781	374,883	2,362,640	(1,285,992)	127,155	247,277	61,438
MILLVILLE CITY	33,065	0.0167732	28,728	181,055	(98,549)	9,744	18,949	4,708
MINERSVILLE TOWN	22,522	0.0114250	19,568	123,325	(67,126)	6,637	12,907	3,207
MOAB VALLEY FIRE PROTECTION	1,909	0.0009684	1,659	10,453	(5,690)	563	1,094	272
MONA CITY	20,097	0.0101949	17,461	110,047	(59,899)	5,923	11,518	2,862
MONROE CITY	74,297	0.0376894	64,552	406,831	(221,440)	21,895	42,579	10,579
MORGAN CITY CORPORATION	165,688	0.0840506	143,958	907,269	(493,829)	48,828	94,956	23,593
MORGAN COUNTY	232,699	0.1180440	202,180	1,274,204	(693,553)	68,576	133,360	33,135
MORONI CITY	19,005	0.0096409	16,512	104,067	(56,644)	5,601	10,892	2,706
MOUNT PLEASANT CITY	126,415	0.0641278	109,835	692,216	(376,775)	37,254	72,448	18,000
MOUNTAIN GREEN SEWER IMP DIST	4,609	0.0023383	4,005	25,240	(13,738)	1,358	2,642	656
MOUNTAIN REGIONAL WATER SSD	303,720	0.1540714	263,886	1,663,096	(905,228)	89,506	174,062	43,247
MOUNTAINLAND ASSN OF GOVT	521,635	0.2646157	453,220	2,856,346	(1,554,718)	153,726	298,949	74,277
MT OLYMPUS IMPROVEMENT DIST	298,117	0.1512294	259,018	1,632,418	(888,530)	87,855	170,851	42,450
MURRAY CITY	2,587,677	1.3126809	2,248,293	14,169,494	(7,712,498)	762,588	1,482,996	368,465
MYTON CITY	5,493	0.0027865	4,773	30,078	(16,372)	1,619	3,148	782
N TOOEE FIRE PROTECTION SD	2,398	0.0012163	2,083	13,129	(7,146)	707	1,374	341
N UT ENVIRONMENTAL RSRC AGCY	103,556	0.0525322	89,974	567,049	(308,647)	30,518	59,348	14,746
NEBO CREDIT UNION	183,032	0.0928486	159,026	1,002,237	(545,521)	53,939	104,895	26,062
NEPHI CITY	311,644	0.1580911	270,770	1,706,485	(928,845)	91,841	178,603	44,376
NIBLEY CITY CORPORATION	119,814	0.0607796	104,100	656,074	(357,103)	35,309	68,666	17,061
NORTH DAVIS CO SEWER DIST	488,657	0.2478867	424,568	2,675,768	(1,456,428)	144,007	280,049	69,581
NORTH DAVIS FIRE DISTRICT	14,882	0.0075493	12,930	81,490	(44,355)	4,386	8,529	2,119
NORTH EMERY WATER USERS SSD	7,889	0.0040020	6,854	43,199	(23,513)	2,325	4,521	1,123
NORTH FORK SSD	32,462	0.0164676	28,205	177,756	(96,753)	9,567	18,604	4,622
NORTH LOGAN CITY	133,571	0.0677583	116,053	731,405	(398,106)	39,363	76,550	19,020
NORTH OGDEN CITY	409,796	0.2078820	356,050	2,243,944	(1,221,386)	120,767	234,854	58,352
NORTH PARK POLICE AGENCY	9,563	0.0048512	8,309	52,365	(28,503)	2,818	5,481	1,362
NORTH POINTE SOLID WASTE	183,912	0.0932952	159,791	1,007,058	(548,145)	54,199	105,400	26,188
NORTH VIEW FIRE DISTRICT	3,074	0.0015593	2,671	16,832	(9,161)	906	1,762	438
NORTHEASTERN COUNSELING CTR	439,817	0.2231111	382,133	2,408,332	(1,310,862)	129,614	252,059	62,627
OGDEN CITY CORP	2,737,837	1.3888544	2,378,759	14,991,735	(8,160,047)	806,840	1,569,053	389,847
OQUIRRH REC AND PARKS DISTRICT	146,490	0.0743119	127,278	802,146	(436,611)	43,171	83,954	20,859
ORANGEVILLE CITY	15,855	0.0080431	13,776	86,820	(47,256)	4,673	9,087	2,258
ORDERVILLE TOWN	25,000	0.0126818	21,721	136,891	(74,510)	7,367	14,327	3,560
PANGUITCH CITY CORPORATION	54,125	0.0274564	47,026	296,373	(161,317)	15,950	31,019	7,707
PARK CITY	2,446,414	1.2410208	2,125,557	13,395,972	(7,291,468)	720,957	1,402,038	348,351
PARK CITY FIRE SERVICE	145,648	0.0738846	126,546	797,534	(434,100)	42,922	83,471	20,739
PAROWAN CITY	168,751	0.0856044	146,619	924,041	(502,958)	49,731	96,711	24,029
PAYSON CITY	949,252	0.4815379	824,753	5,197,873	(2,829,218)	279,744	544,016	135,166
PERRY CITY	74,837	0.0379633	65,022	409,788	(223,049)	22,054	42,889	10,656
PIUTE COUNTY	72,306	0.0366796	62,823	395,931	(215,507)	21,309	41,439	10,296
PLAIN CITY	53,516	0.0271479	46,498	293,043	(159,504)	15,771	30,670	7,620
PLEASANT GROVE CITY	568,981	0.2886334	494,357	3,115,600	(1,695,831)	167,678	326,082	81,018
PLEASANT VIEW CITY	174,356	0.0884476	151,489	954,731	(519,663)	51,383	99,923	24,827
POWDER MOUNTAIN WATER & SEWER	39,660	0.0201186	34,458	217,167	(118,204)	11,688	22,729	5,647
PRICE CITY	416,975	0.2115238	362,287	2,283,255	(1,242,783)	122,882	238,968	59,374
PRICE RIVER WATER IMPROVE	209,764	0.1064093	182,252	1,148,616	(625,195)	61,817	120,215	29,869
PROVIDENCE CITY	153,407	0.0778207	133,287	840,021	(457,226)	45,209	87,918	21,844
PROVO CITY CORP	3,835,782	1.9458219	3,332,704	21,003,819	(11,432,442)	1,130,404	2,198,285	546,186
PROVO HOUSING AUTHORITY	137,240	0.0696192	119,240	751,492	(409,039)	40,445	78,652	19,542
PROVO RESER WATER USERS	5,709	0.0028959	4,960	31,259	(17,015)	1,682	3,272	813
PROVO RIVER WATER USERS	176,208	0.0893871	153,098	964,873	(525,183)	51,928	100,985	25,091

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
32,787	915,220	—	—	3,031	945	3,976	357,061	26,755	—	383,816
6,825	700,641	—	—	2,383	690	3,073	280,740	(3,306)	—	277,434
2,927	129,443	—	—	435	—	435	51,193	(676)	—	50,517
18,051	200,200	—	—	626	—	626	73,703	24,304	—	98,007
4,972	70,541	—	—	225	3,331	3,556	26,532	22,319	—	48,851
3,521	253,038	—	—	857	13,452	14,309	100,963	(2,189)	—	98,774
10,235	738,104	—	—	2,500	6,526	9,026	294,519	(25,500)	—	269,019
38,767	474,637	—	—	1,497	—	1,497	176,367	70,310	—	246,677
4,451	37,852	—	—	115	—	115	13,515	1,714	—	15,229
801	23,552	—	—	78	2,525	2,603	9,206	(9,326)	—	(120)
402	2,331	—	—	7	8,151	8,158	780	(4,121)	—	(3,341)
5,682	25,985	—	—	70	—	70	8,215	12,226	—	20,441
636	75,689	—	—	258	5,544	5,802	30,369	(16,475)	—	13,894
5,925	173,302	—	—	575	8,514	9,089	67,726	11,186	—	78,912
3,494	238,565	—	—	807	23,395	24,202	95,117	(24,536)	—	70,581
445	19,644	—	—	66	1,074	1,140	7,768	1,339	—	9,107
4,367	132,069	—	—	439	—	439	51,673	5,005	—	56,678
1,223	5,879	—	—	16	2,855	2,871	1,884	6,156	—	8,040
7,432	314,247	—	—	1,054	11,672	12,726	124,147	(21,889)	—	102,258
23,315	550,267	—	—	1,810	8,004	9,814	213,221	44,872	—	258,093
—	301,156	—	—	1,034	18,567	19,601	121,857	(21,887)	—	99,970
—	2,614,049	—	—	8,978	102,230	111,208	1,057,728	(95,364)	—	962,364
—	5,549	—	—	19	5,532	5,551	2,245	(5,576)	—	(3,331)
1,471	3,893	—	—	8	—	8	980	1,439	—	2,419
6,447	111,059	—	—	359	1,843	2,202	42,329	11,184	—	53,513
8,258	193,154	—	—	635	—	635	74,815	15,914	—	90,729
9,967	324,787	—	—	1,081	2,345	3,426	127,386	(4,567)	—	122,819
2,191	123,227	—	—	416	3,887	4,303	48,975	(6,807)	—	42,168
—	493,637	—	—	1,695	20,627	22,322	199,741	(20,745)	—	178,996
697	15,731	—	—	52	4	56	6,083	418	—	6,501
439	8,408	—	—	27	—	27	3,225	1,077	—	4,302
919	33,712	—	—	113	—	113	13,269	3,272	—	16,541
11,888	146,821	—	—	463	1,334	1,797	54,598	(1,998)	—	52,600
12,524	426,497	—	—	1,422	—	1,422	167,507	24,212	—	191,719
1,169	10,830	—	—	33	2,252	2,285	3,909	(2,642)	—	1,267
909	186,696	—	—	638	5,464	6,102	75,175	(6,459)	—	68,716
173	3,279	—	—	11	60	71	1,256	(2,163)	—	(907)
24,161	468,461	—	—	1,526	521	2,047	179,778	33,992	—	213,770
50,252	2,815,992	—	—	9,499	19,054	28,553	1,119,107	(52,016)	—	1,067,091
3,165	151,149	—	—	508	3,323	3,831	59,879	(13,845)	—	46,034
324	16,342	—	—	55	1,086	1,141	6,481	(1,731)	—	4,750
2,849	28,103	—	—	87	—	87	10,219	3,646	—	13,865
3,393	58,069	—	—	188	—	188	22,124	4,173	—	26,297
130,349	2,601,695	—	—	8,488	48,977	57,465	999,986	(146,065)	—	853,921
22,810	169,942	—	—	505	—	505	59,535	19,394	—	78,929
4,918	175,389	—	—	585	6,317	6,902	68,978	(11,917)	—	57,061
50,099	1,009,025	—	—	3,293	30	3,323	388,012	36,274	—	424,286
—	75,599	—	—	260	3,115	3,375	30,590	(1,066)	—	29,524
—	73,044	—	—	251	8,209	8,460	29,556	(10,013)	—	19,543
—	54,061	—	—	186	3,185	3,371	21,875	(7,973)	—	13,902
—	574,778	—	—	1,974	15,851	17,825	232,574	(21,884)	—	210,690
11,973	188,106	—	—	605	2,198	2,803	71,269	(2,689)	—	68,580
1,988	42,052	—	—	138	—	138	16,211	12,233	—	28,444
—	421,224	—	—	1,447	12,399	13,846	170,441	(35,725)	—	134,716
—	211,901	—	—	728	11,028	11,756	85,742	(15,432)	—	70,310
13,277	168,248	—	—	532	—	532	62,706	21,451	—	84,157
—	3,874,875	—	—	13,308	90,337	103,645	1,567,899	(83,718)	—	1,484,181
5,346	143,985	—	—	476	3,477	3,953	56,098	9,111	—	65,209
417	6,184	—	—	20	—	20	2,333	2,342	—	4,675
4,418	182,422	—	—	611	5,304	5,915	72,026	154	—	72,180

**Noncontributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
RECREATION & HABILITATION SRVS	\$ 9,028	0.0045796%	\$ 7,844	49,434	(26,907)	2,660	5,174	1,285
REDMOND TOWN	21,261	0.0107854	18,473	116,421	(63,368)	6,266	12,185	3,027
RICH COUNTY	109,541	0.0555681	95,174	599,820	(326,484)	32,282	62,778	15,598
RICHFIELD CITY	176,247	0.0894067	153,131	965,084	(525,298)	51,940	101,007	25,096
RICHMOND CITY	54,694	0.0277452	47,521	299,490	(163,014)	16,118	31,345	7,788
RIVERDALE CITY	335,952	0.1704221	291,890	1,839,590	(1,001,295)	99,005	192,534	47,837
ROOSEVELT CITY	222,392	0.1128156	193,225	1,217,767	(662,834)	65,539	127,453	31,667
ROOSEVELT CITY HOUSING	8,574	0.0043493	7,449	46,948	(25,554)	2,527	4,914	1,221
ROY CITY	622,532	0.3157992	540,885	3,408,837	(1,855,440)	183,460	356,773	88,644
ROY WATER CONSERV DIST	100,587	0.0510259	87,395	550,790	(299,797)	29,643	57,646	14,323
S UTAH VALLEY ELECTRIC SVC DST	220,109	0.1116572	191,241	1,205,263	(656,028)	64,866	126,144	31,342
S UTAH VALLEY SOLID WASTE	191,361	0.0970737	166,263	1,047,844	(570,345)	56,394	109,669	27,248
SALEM CITY	438,995	0.2226939	381,419	2,403,829	(1,308,411)	129,372	251,588	62,509
SALINA CITY	51,838	0.0262963	45,039	283,851	(154,501)	15,277	29,708	7,381
SALT LAKE CITY CORP	19,130,961	9.7047854	16,621,860	104,756,533	(57,019,297)	5,637,888	10,963,943	2,724,102
SALT LAKE CITY PUBLIC LIBRARY	1,074,776	0.5452141	933,815	5,885,214	(3,203,340)	316,736	615,953	153,040
SALT LAKE CO SERV AREA 3	33,283	0.0168840	28,918	182,251	(99,200)	9,809	19,075	4,739
SALT LAKE COUNTY	25,373,406	12.8714637	22,045,583	138,938,667	(75,624,733)	7,477,526	14,541,480	3,612,979
SAN JUAN COUNTY	643,970	0.3266739	559,510	3,526,222	(1,919,333)	189,778	369,059	91,696
SAN JUAN MENTAL HEALTH	116,951	0.0593270	101,612	640,394	(348,569)	34,465	67,024	16,653
SAN RAFAEL SPECIAL SERV DIST	3,529	0.0017902	3,066	19,324	(10,518)	1,040	2,022	503
SANDY CITY	2,779,499	1.4099887	2,414,957	15,219,865	(8,284,219)	819,117	1,592,929	395,779
SANDY SUBURBAN IMP DIST	221,317	0.1122698	192,290	1,211,876	(659,628)	65,222	126,836	31,514
SANPETE COUNTY	401,358	0.2036013	348,718	2,197,737	(1,196,235)	118,280	230,018	57,150
SANTAQUIN CITY	275,670	0.1398423	239,515	1,509,502	(821,627)	81,240	157,986	39,253
SEVEN COUNTY INFRASTRUCTURE	20,696	0.0104989	17,982	113,328	(61,685)	6,099	11,861	2,947
SEVIER COUNTY	481,124	0.2440653	418,023	2,634,518	(1,433,976)	141,787	275,732	68,508
SIX-COUNTY ASSOC OF GOVT	182,523	0.0925907	158,585	999,453	(544,005)	53,790	104,604	25,990
SLC MOSQUITO ABATEMENT	105,365	0.0534497	91,546	576,953	(314,037)	31,051	60,385	15,003
SMITHFIELD CITY CORP	261,672	0.1327415	227,353	1,432,854	(779,907)	77,115	149,964	37,260
SNYDERVILLE BASIN SRD	185,651	0.0941774	161,302	1,016,581	(553,328)	54,711	106,397	26,435
SNYDERVILLE BASIN W R D	610,773	0.3098341	530,668	3,344,448	(1,820,393)	179,995	350,034	86,969
SO DAVIS METRO FIRE AGENCY	27,930	0.0141686	24,267	152,940	(83,246)	8,231	16,007	3,977
SO DAVIS RECREATION CENTER	112,862	0.0572527	98,059	618,004	(336,381)	33,260	64,681	16,071
SO SL VALLEY MOSQ ABATE	44,005	0.0223231	38,234	240,963	(131,157)	12,968	25,219	6,266
SO UTAH VALLEY ANIMAL SVCS SSD	23,618	0.0119808	20,520	129,325	(70,392)	6,960	13,535	3,363
SO UTAH VALLEY POWER SYSTEMS	28,107	0.0142580	24,420	153,905	(83,771)	8,283	16,108	4,002
SOLID WASTE SSD #1	164,954	0.0836783	143,320	903,250	(491,642)	48,612	94,535	23,488
SOUTH DAVIS SEWER DIST	429,795	0.2180273	373,426	2,353,456	(1,280,993)	126,661	246,315	61,200
SOUTH DAVIS WATER DIST	64,879	0.0329120	56,370	355,263	(193,370)	19,120	37,182	9,238
SOUTH OGDEN CITY	339,314	0.1721276	294,811	1,858,000	(1,011,315)	99,996	194,460	48,316
SOUTH OGDEN CONSERV DIST	266,361	0.1351201	231,427	1,458,529	(793,882)	78,497	152,651	37,928
SOUTH VALLEY SEWER DISTRICT	526,193	0.2669281	457,181	2,881,307	(1,568,304)	155,069	301,561	74,926
SOUTH VALLEY WATER RECLAMATION	569,104	0.2886958	494,463	3,116,274	(1,696,197)	167,715	326,153	81,036
SOUTH WEBER CITY	104,024	0.0527693	90,381	569,609	(310,040)	30,656	59,616	14,812
SOUTHEASTERN UTAH AOG	169,119	0.0857911	146,939	926,056	(504,055)	49,839	96,922	24,081
SOUTHEASTERN UTAH HEALTH	231,190	0.1172786	200,869	1,265,942	(689,056)	68,132	132,495	32,920
SPANISH FORK CITY	1,799,859	0.9130355	1,563,801	9,855,595	(5,364,430)	530,418	1,031,498	256,286
SPRING CITY	38,346	0.0194523	33,317	209,974	(114,290)	11,301	21,976	5,460
SPRINGVILLE CITY	1,511,226	0.7666174	1,313,023	8,275,111	(4,504,168)	445,358	866,083	215,187
ST GEORGE HOUSING AUTH	26,653	0.0135203	23,157	145,942	(79,437)	7,854	15,275	3,795
STANSBURY PARK IMPROV DIST	84,740	0.0429869	73,626	464,014	(252,564)	24,973	48,564	12,066
STANSBURY SERVICE AGENCY	51,515	0.0261325	44,758	282,082	(153,538)	15,181	29,523	7,335
STATEWIDE ASSOC PUBLIC ATTYS	12,754	0.0064699	11,081	69,838	(38,013)	3,759	7,309	1,816
SUMMIT COUNTY	2,323,977	1.1789108	2,019,178	12,725,537	(6,926,548)	684,875	1,331,870	330,917
SUMMIT COUNTY SERVICE AREA 3	6,899	0.0034999	5,994	37,779	(20,563)	2,033	3,954	982
SUNSET CITY	86,646	0.0439538	75,282	474,451	(258,245)	25,534	49,657	12,338
SW BEHAVIORAL HEALTH CENTER	1,266,619	0.6425324	1,100,497	6,935,699	(3,775,122)	373,272	725,898	180,357
SW MOSQUITO ABATEMENT/CONTROL	25,656	0.0130146	22,291	140,484	(76,466)	7,561	14,703	3,653
SW UT PUBLIC HEALTH DEPT	405,469	0.2056870	352,290	2,220,251	(1,208,489)	119,492	232,374	57,736

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
—	9,119	—	—	31	326	357	3,690	(482)	—	3,208
1,202	22,680	—	—	74	1,067	1,141	8,691	(701)	—	7,990
259	110,917	—	—	380	5,663	6,043	44,776	(5,009)	—	39,767
—	178,043	—	—	611	15,125	15,736	72,042	(19,098)	—	52,944
822	56,073	—	—	190	438	628	22,356	848	—	23,204
6,291	345,667	—	—	1,166	5,305	6,471	137,322	(8,631)	—	128,691
—	224,659	—	—	772	6,281	7,053	90,904	(16,140)	—	74,764
232	8,894	—	—	30	—	30	3,505	288	—	3,793
10,808	639,685	—	—	2,160	15,740	17,900	254,464	(31,569)	—	222,895
2,711	104,323	—	—	349	—	349	41,116	7,654	—	48,770
8,128	230,480	—	—	764	—	764	89,971	19,627	—	109,598
6,470	199,781	—	—	664	482	1,146	78,220	5,025	—	83,245
48,395	491,864	—	—	1,523	—	1,523	179,442	34,648	—	214,090
412	52,778	—	—	180	6,260	6,440	21,189	(1,865)	—	19,324
—	19,325,933	—	—	66,372	121,244	187,616	7,819,894	(281,110)	—	7,538,784
22,508	1,108,237	—	—	3,729	493	4,222	439,321	74,064	—	513,385
1,268	34,891	—	—	115	—	115	13,605	450	—	14,055
34,510	25,666,495	—	—	88,029	408,744	496,773	10,371,545	(376,439)	—	9,995,106
1,757	652,290	—	—	2,234	60,072	62,306	263,226	(82,435)	—	180,791
—	118,142	—	—	406	5,914	6,320	47,804	(5,943)	—	41,861
1,041	4,606	—	—	12	—	12	1,443	559	—	2,002
20,609	2,828,434	—	—	9,643	60,588	70,231	1,136,137	(109,747)	—	1,026,390
2,190	225,762	—	—	768	10,692	11,460	90,464	345	—	90,809
10,133	415,581	—	—	1,392	705	2,097	164,057	19,592	—	183,649
6,875	285,354	—	—	956	2,363	3,319	112,682	16,186	—	128,868
6,106	27,013	—	—	72	—	72	8,460	3,277	—	11,737
2,365	488,392	—	—	1,669	5,335	7,004	196,662	6,236	—	202,898
1,934	186,318	—	—	633	311	944	74,607	(23)	—	74,584
4,829	111,268	—	—	366	—	366	43,069	3,084	—	46,153
6,058	270,397	—	—	908	958	1,866	106,960	10,439	—	117,399
5,141	192,684	—	—	644	14,237	14,881	75,886	(5,513)	—	70,373
10,268	627,266	—	—	2,119	4,049	6,168	249,657	11,536	—	261,193
1,742	29,957	—	—	97	—	97	11,417	1,049	—	12,466
1,469	115,481	—	—	392	5,559	5,951	46,133	4,427	—	50,560
340	44,793	—	—	153	1,172	1,325	17,987	727	—	18,714
1,599	25,457	—	—	82	—	82	9,654	1,158	—	10,812
4,364	32,757	—	—	98	210	308	11,489	2,961	—	14,450
59,697	226,332	—	—	572	—	572	67,426	59,332	—	126,758
23,302	457,478	—	—	1,491	—	1,491	175,681	30,249	—	205,930
1,039	66,579	—	—	225	200	425	26,520	(1,773)	—	24,747
3,146	345,918	—	—	1,177	38,121	39,298	138,696	(24,519)	—	114,177
10,229	279,305	—	—	924	—	924	108,877	11,109	—	119,986
—	531,556	—	—	1,826	35,918	37,744	215,085	(24,999)	—	190,086
7,822	582,726	—	—	1,974	370	2,344	232,624	14,075	—	246,699
7,647	112,731	—	—	361	—	361	42,520	7,239	—	49,759
7,079	177,921	—	—	587	—	587	69,129	16,345	—	85,474
14,874	248,421	—	—	802	—	802	94,500	27,889	—	122,389
44,909	1,863,111	—	—	6,244	12,785	19,029	735,703	71,870	—	807,573
6,383	45,120	—	—	133	1,730	1,863	15,674	6,817	—	22,491
36,783	1,563,411	—	—	5,243	13,692	18,935	617,723	(42,026)	—	575,697
26	26,950	—	—	92	1,509	1,601	10,894	(2,852)	—	8,042
3,043	88,646	—	—	294	—	294	34,638	14,260	—	48,898
11,314	63,353	—	—	179	472	651	21,057	10,769	—	31,826
365	13,249	—	—	44	407	451	5,213	5,077	—	10,290
14,233	2,361,895	—	—	8,063	25,576	33,639	949,939	(4,251)	—	945,688
3,384	10,353	—	—	24	—	24	2,820	3,180	—	6,000
4,413	91,942	—	—	301	3,214	3,515	35,417	1,061	—	36,478
28,434	1,307,961	—	—	4,394	7,844	12,238	517,738	(17,938)	—	499,800
207	26,124	—	—	89	2,320	2,409	10,487	(1,342)	—	9,145
1,890	411,492	—	—	1,407	840	2,247	165,738	2,971	—	168,709

**Noncontributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SYRACUSE CITY CORP	\$ 499,412	0.2533424%	\$ 433,912	2,734,658	(1,488,483)	147,176	286,213	71,112
TAYLOR WEST WEBER WTR IMP DIST	22,669	0.0114997	19,696	124,131	(67,565)	6,681	12,992	3,228
TAYLORSVILLE-BENNION IMP	407,801	0.2068697	354,316	2,233,017	(1,215,438)	120,179	233,710	58,068
TIMBERLAKES WATER SSD	40,849	0.0207218	35,491	223,678	(121,748)	12,038	23,410	5,817
TIMPANOGOS SSD	362,755	0.1840191	315,179	1,986,361	(1,081,182)	106,904	207,895	51,654
TOOELE CITY	804,792	0.4082560	699,240	4,406,845	(2,398,659)	237,172	461,226	114,596
TOOELE COUNTY	1,681,943	0.8532190	1,461,350	9,209,917	(5,012,985)	495,668	963,921	239,496
TOOELE COUNTY HOUSING	54,326	0.0275587	47,201	297,477	(161,918)	16,010	31,134	7,736
TOOELE VALLEY MOSQUITO ABTMNT	5,914	0.0030003	5,139	32,386	(17,628)	1,743	3,390	842
TOQUERVILLE CITY	30,876	0.0156629	26,827	169,070	(92,025)	9,099	17,695	4,397
TORREY TOWN	2,579	0.0013082	2,241	14,121	(7,686)	760	1,478	367
TOWN OF ALTA	85,493	0.0433691	74,280	468,140	(254,810)	25,195	48,996	12,174
TOWN OF APPLE VALLEY	4,827	0.0024487	4,194	26,432	(14,387)	1,423	2,766	687
TOWN OF BRIAN HEAD	110,784	0.0561989	96,255	606,629	(330,190)	32,648	63,490	15,775
TOWN OF DANIEL	9,077	0.0046045	7,886	49,702	(27,053)	2,675	5,202	1,292
TOWN OF GARDEN CITY	49,361	0.0250397	42,887	270,286	(147,118)	14,547	28,289	7,029
TOWN OF GOSHEN	5,879	0.0029821	5,108	32,190	(17,521)	1,732	3,369	837
TOWN OF HIDEOUT	73,968	0.0375224	64,266	405,029	(220,458)	21,798	42,391	10,532
TOWN OF LEVAN	29,644	0.0150378	25,756	162,323	(88,353)	8,736	16,989	4,221
TOWN OF MANILA	15,474	0.0078499	13,445	84,734	(46,121)	4,560	8,868	2,203
TOWN OF MANTUA	22,524	0.0114262	19,570	123,338	(67,133)	6,638	12,909	3,207
TOWN OF RANDOLPH	8,112	0.0041149	7,048	44,418	(24,177)	2,391	4,649	1,155
TOWN OF SPRINGDALE	189,510	0.0961348	164,655	1,037,710	(564,828)	55,848	108,608	26,985
TRANS-JORDAN CITIES	322,972	0.1638377	280,613	1,768,516	(962,609)	95,180	185,095	45,989
TREMONTON CITY	265,324	0.1345942	230,526	1,452,852	(790,792)	78,191	152,057	37,780
TRICOUNTY HEALTH DEPT	200,211	0.1015636	173,953	1,096,310	(596,725)	59,002	114,741	28,509
TRIDELL-LAPOINT WATER	8,058	0.0040879	7,002	44,126	(24,018)	2,375	4,618	1,147
UINTAH ANIMAL CONTROL/SHELTER	28,790	0.0146046	25,014	157,647	(85,808)	8,484	16,499	4,099
UINTAH BASIN ASSN OF GOVT	210,747	0.1069082	183,107	1,154,001	(628,126)	62,107	120,779	30,009
UINTAH BASIN ASST COUNCIL	10,537	0.0053455	9,155	57,701	(31,407)	3,105	6,039	1,500
UINTAH CO CARE CENTER SSD	268,028	0.1359657	232,875	1,467,657	(798,850)	78,988	153,607	38,165
UINTAH COUNTY	1,080,142	0.5479364	938,477	5,914,599	(3,219,334)	318,318	619,029	153,804
UINTAH FIRE SUPPRESSION SSD	6,918	0.0035093	6,011	37,880	(20,618)	2,039	3,965	985
UINTAH HIGHLANDS IMPROV DIST	26,940	0.0136661	23,407	147,516	(80,294)	7,939	15,439	3,836
UINTAH MOSQUITO ABATE DISTRICT	33,860	0.0171764	29,419	185,408	(100,918)	9,978	19,405	4,821
UINTAH RECREATION DISTRICT	123,693	0.0627470	107,470	677,311	(368,662)	36,452	70,888	17,613
UINTAH TRANSPORTATION SSD	5,556	0.0028182	4,827	30,421	(16,558)	1,637	3,184	791
UINTAH WATER CONSERV DIST	72,240	0.0366460	62,765	395,569	(215,309)	21,289	41,401	10,286
UNIFIED FIRE AUTHORITY	562,102	0.2851438	488,380	3,077,933	(1,675,328)	165,651	322,140	80,039
UNIFIED POLICE DEPARTMENT	695,491	0.3528100	604,275	3,808,343	(2,072,893)	204,961	398,586	99,033
UPPER COUNTRY WATER DIST	14,857	0.0075369	12,909	81,356	(44,282)	4,378	8,515	2,116
UT MUNICIPAL POWER AGENCY	435,744	0.2210447	378,594	2,386,027	(1,298,721)	128,413	249,724	62,047
UT PUBLIC EMPLOYEES ASSN	25,602	0.0129873	22,244	140,189	(76,305)	7,545	14,672	3,645
UTAH ASSOCIATION OF COUNTIES	81,084	0.0411322	70,449	443,994	(241,667)	23,895	46,469	11,546
UTAH CO HOUSING AUTHORITY	132,222	0.0670739	114,881	724,017	(394,085)	38,966	75,776	18,827
UTAH COUNTIES INDEMNITY POOL	89,388	0.0453451	77,665	489,469	(266,420)	26,343	51,228	12,728
UTAH COUNTY	6,320,770	3.2064105	5,491,776	34,611,012	(18,838,878)	1,862,729	3,622,430	900,029
UTAH LAKE COMMISSION	4,085	0.0020721	3,549	22,367	(12,174)	1,204	2,341	582
UTAH LAKE DISTRIBUTING CO	8,192	0.0041554	7,117	44,855	(24,415)	2,414	4,695	1,166
UTAH LOCAL GOVERNMENTS TRUST	260,199	0.1319942	226,073	1,424,787	(775,516)	76,681	149,120	37,050
UTAH ZOOLOGICAL SOCIETY	663,665	0.3366653	576,623	3,634,072	(1,978,036)	195,582	380,346	94,501
UTOPIA	731,785	0.3712209	635,808	4,007,076	(2,181,064)	215,657	419,385	104,201
VALLEY EMERGENCY COMM CTR	1,125,135	0.5707604	977,569	6,160,969	(3,353,434)	331,577	644,814	160,211
VERNAL CITY	315,175	0.1598827	273,839	1,725,825	(939,372)	92,882	180,627	44,879
VINEYARD TOWN	230,355	0.1168548	200,143	1,261,368	(686,566)	67,886	132,016	32,801
WASATCH BEHAVIORAL HEALTH	3,669,278	1.8613572	3,188,037	20,092,080	(10,936,180)	1,081,335	2,102,861	522,477
WASATCH COUNTY	1,513,117	0.7675762	1,314,665	8,285,461	(4,509,801)	445,915	867,166	215,456
WASATCH COUNTY FIRE DISTRICT	19,155	0.0097170	16,643	104,888	(57,091)	5,645	10,978	2,728
WASATCH FRONT REGIONAL COUNCIL	359,641	0.1824391	312,472	1,969,306	(1,071,899)	105,986	206,110	51,210
WASATCH FRONT WASTE/RECYCLING	659,018	0.3343075	572,585	3,608,621	(1,964,183)	194,212	377,683	93,839

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
33,439	537,940	—	—	1,733	—	1,733	204,138	46,220	—	250,358
671	23,572	—	—	79	1,068	1,147	9,266	(5,750)	—	3,516
9,135	421,092	—	—	1,415	—	1,415	166,691	11,479	—	178,170
216	41,481	—	—	142	1,573	1,715	16,697	(5,525)	—	11,172
3,609	370,062	—	—	1,259	10,500	11,759	148,278	7,380	—	155,658
14,424	827,418	—	—	2,792	—	2,792	328,963	31,402	—	360,365
21,696	1,720,781	—	—	5,835	8,980	14,815	687,504	6,663	—	694,167
8,327	63,207	—	—	188	1,336	1,524	22,206	2,068	—	24,274
226	6,201	—	—	21	—	21	2,418	607	—	3,025
4,087	35,278	—	—	107	333	440	12,621	1,560	—	14,181
—	2,605	—	—	9	438	447	1,054	(310)	—	744
3,388	89,753	—	—	297	1,637	1,934	34,946	1,917	—	36,863
1,424	6,300	—	—	17	2,504	2,521	1,973	(2,643)	—	(670)
4,903	116,816	—	—	384	267	651	45,284	4,828	—	50,112
121	9,290	—	—	31	1,800	1,831	3,710	(110)	—	3,600
4,844	54,709	—	—	171	1,289	1,460	20,176	6,069	—	26,245
17	5,955	—	—	20	832	852	2,403	(1,270)	—	1,133
29,879	104,600	—	—	257	—	257	30,235	21,550	—	51,785
927	30,873	—	—	103	—	103	12,117	1,084	—	13,201
2,899	18,530	—	—	54	19	73	6,325	1,852	—	8,177
418	23,172	—	—	78	—	78	9,207	2,432	—	11,639
208	8,403	—	—	28	734	762	3,316	(114)	—	3,202
12,382	203,823	—	—	657	301	958	77,463	12,918	—	90,381
15,080	341,344	—	—	1,121	2,857	3,978	132,017	(2,854)	—	129,163
5,403	273,431	—	—	921	3,901	4,822	108,453	1,612	—	110,065
119,868	322,120	—	—	695	—	695	81,838	105,936	—	187,774
123	8,263	—	—	28	225	253	3,294	339	—	3,633
—	29,082	—	—	100	8,268	8,368	11,768	(12,286)	—	(518)
2,371	215,266	—	—	731	2,884	3,615	86,144	12,588	—	98,732
706	11,350	—	—	37	—	37	4,307	590	—	4,897
—	270,760	—	—	930	61,854	62,784	109,558	(91,077)	—	18,481
—	1,091,151	—	—	3,747	236,828	240,575	441,515	(265,209)	—	176,306
105	7,094	—	—	24	247	271	2,828	293	—	3,121
3,025	30,239	—	—	93	—	93	11,012	7,507	—	18,519
1,081	35,285	—	—	117	681	798	13,840	(398)	—	13,442
—	124,953	—	—	429	33,378	33,807	50,560	(33,919)	—	16,641
23	5,635	—	—	19	6,648	6,667	2,271	(13,345)	—	(11,074)
198	73,174	—	—	251	11,422	11,673	29,529	(17,377)	—	12,152
10,092	577,922	—	—	1,950	20,939	22,889	229,762	24,257	—	254,019
—	702,580	—	—	2,413	51,586	53,999	284,286	(192,683)	—	91,603
811	15,820	—	—	52	7,959	8,011	6,073	(4,690)	—	1,383
3,114	443,298	—	—	1,512	10,208	11,720	178,113	5,742	—	183,855
271	26,133	—	—	89	2,734	2,823	10,465	(1,344)	—	9,121
420	82,330	—	—	281	9,975	10,256	33,143	(11,270)	—	21,873
3,979	137,548	—	—	459	—	459	54,047	(11,901)	—	42,146
1,930	92,229	—	—	310	198	508	36,538	5,034	—	41,572
59,348	6,444,536	—	—	21,929	94,324	116,253	2,583,652	6,206	—	2,589,858
360	4,487	—	—	14	—	14	1,670	290	—	1,960
1,197	9,472	—	—	28	—	28	3,348	2,765	—	6,113
10,458	273,309	—	—	903	8,132	9,035	106,358	7,991	—	114,349
11,013	681,442	—	—	2,303	59,514	61,817	271,277	(153,676)	—	117,601
63,789	803,032	—	—	2,539	—	2,539	299,121	109,163	—	408,284
3,453	1,140,055	—	—	3,904	11,927	15,831	459,906	58,647	—	518,553
—	318,388	—	—	1,093	23,536	24,629	128,830	(52,060)	—	76,770
22,949	255,652	—	—	799	—	799	94,159	39,953	—	134,112
342,642	4,049,315	—	—	12,730	—	12,730	1,499,839	433,986	—	1,933,825
10,866	1,539,403	—	—	5,250	16,806	22,056	618,495	(37,734)	—	580,761
4,139	23,490	—	—	66	—	66	7,830	8,052	—	15,882
—	363,306	—	—	1,248	9,814	11,062	147,005	(17,167)	—	129,838
31,243	696,977	—	—	2,286	—	2,286	269,377	49,835	—	319,212

**Noncontributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts (Concluded)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
WASATCH INTEGRATED WASTE MGMT	\$ 423,439	0.2148029%	\$ 367,903	2,318,651	(1,262,049)	124,787	242,673	60,294
WASHINGTON CITY	1,092,497	0.5542038	949,212	5,982,252	(3,256,158)	321,959	626,110	155,563
WASHINGTON CO SOLID WASTE	87,961	0.0446212	76,425	481,655	(262,166)	25,922	50,411	12,525
WASHINGTON CO WAT CON DIST	409,252	0.2076062	355,577	2,240,967	(1,219,765)	120,607	234,542	58,274
WASHINGTON COUNTY	2,010,817	1.0200504	1,747,090	11,010,748	(5,993,183)	592,587	1,152,398	286,325
WASTE MANAGEMENT SERV DIST #5	27,128	0.0137617	23,570	148,548	(80,855)	7,995	15,547	3,863
WAYNE COUNTY	135,465	0.0687190	117,698	741,775	(403,750)	39,922	77,635	19,289
WEBER AREA DISPATCH 911	29,875	0.0151551	25,957	163,589	(89,042)	8,804	17,121	4,254
WEBER BASIN WATER CONSERV	947,208	0.4805015	822,978	5,186,686	(2,823,129)	279,142	542,845	134,875
WEBER CO MOSQUITO ABATE	93,306	0.0473322	81,068	510,919	(278,095)	27,497	53,473	13,286
WEBER COUNTY CORP	4,196,887	2.1290038	3,646,449	22,981,143	(12,508,705)	1,236,821	2,405,234	597,605
WEBER FIRE DISTRICT	23,640	0.0119921	20,539	129,447	(70,458)	6,967	13,548	3,366
WEBER HUMAN SERVICES	2,056,867	1.0434111	1,787,101	11,262,910	(6,130,436)	606,158	1,178,790	292,882
WELLINGTON CITY	14,911	0.0075642	12,956	81,650	(44,443)	4,394	8,546	2,123
WELLSVILLE CITY CORP	44,492	0.0225701	38,657	243,629	(132,608)	13,112	25,498	6,335
WEST BOUNTIFUL CITY	109,251	0.0554212	94,923	598,234	(325,621)	32,196	62,612	15,557
WEST KANE COUNTY SSD #1	39,167	0.0198688	34,030	214,470	(116,737)	11,543	22,447	5,577
WEST POINT CITY	169,551	0.0860103	147,314	928,422	(505,343)	49,967	97,170	24,143
WEST VALLEY CITY	3,356,047	1.7024609	2,915,888	18,376,903	(10,002,604)	989,026	1,923,349	477,875
WHITE CITY WATER IMP DIST	81,611	0.0414000	70,908	446,885	(243,241)	24,051	46,771	11,621
WILLARD CITY CORP	59,747	0.0303087	51,911	327,162	(178,075)	17,608	34,241	8,508
WOODS CROSS CITY	207,878	0.1054525	180,614	1,138,288	(619,573)	61,261	119,135	29,600
	\$197,129,149	100.0000000%	\$171,274,888	1,079,431,728	(587,537,947)	58,093,898	112,974,607	28,069,681
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
CANYONLANDS CARE CENTER	\$ —	0.0000000%	\$ —	—	—	—	—	—
GRAND CO CEMETERY MTCE DIST	—	0.0000000	—	—	—	—	—	—
SIX-CO ECONOMIC DEVELOP	—	0.0000000	—	—	—	—	—	—
SUMMIT MOSQUITO ABATEMENT DIST	—	0.0000000	—	—	—	—	—	—
SUNNYSIDE CITY	—	0.0000000	—	—	—	—	—	—
VALLEY MENTAL HEALTH	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$197,129,149	100.0000000%	\$171,274,888	1,079,431,728	(587,537,947)	58,093,898	112,974,607	28,069,681

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
59,300	487,054	—	—	1,469	—	1,469	173,083	65,159	—	238,242
45,739	1,149,371	—	—	3,790	—	3,790	446,565	37,716	—	484,281
—	88,858	—	—	305	11,960	12,265	35,955	(8,683)	—	27,272
5,709	419,132	—	—	1,420	1,314	2,734	167,284	10,759	—	178,043
20,714	2,052,024	—	—	6,976	12,125	19,101	821,933	18,993	—	840,926
1,688	29,093	—	—	94	133	227	11,089	(491)	—	10,598
6,303	143,149	—	—	470	7,574	8,044	55,372	4,491	—	59,863
477	30,656	—	—	104	310,703	310,807	12,212	(303,220)	—	(291,008)
20,963	977,825	—	—	3,286	40,840	44,126	387,177	12,011	—	399,188
3,052	97,308	—	—	324	—	324	38,139	247	—	38,386
88,708	4,328,368	—	—	14,561	28,521	43,082	1,715,503	(57,703)	—	1,657,800
1,409	25,290	—	—	82	—	82	9,663	3,430	—	13,093
58,622	2,136,452	—	—	7,136	—	7,136	840,757	34,648	—	875,405
82	15,145	—	—	52	426	478	6,095	(2,157)	—	3,938
944	45,889	—	—	154	11,073	11,227	18,186	(11,221)	—	6,965
4,725	115,090	—	—	379	2,915	3,294	44,657	(9,628)	—	35,029
288	39,855	—	—	136	1,454	1,590	16,010	435	—	16,445
19,282	190,562	—	—	588	853	1,441	69,305	13,611	—	82,916
48,843	3,439,093	—	—	11,643	11,442	23,085	1,371,804	(21,868)	—	1,349,936
274	82,717	—	—	283	348	631	33,359	(2,389)	—	30,970
3,700	64,057	—	—	207	122	329	24,422	8,359	—	32,781
9,010	219,006	—	—	721	5,766	6,487	84,971	2,601	—	87,572
4,189,117	203,327,303	—	—	683,914	3,636,925	4,320,839	80,577,716	(192,080)	—	80,385,636
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	127	127	—	(6,674)	—	(6,674)
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
4,189,117	203,327,303	—	—	683,914	3,637,051	4,320,965	80,577,716	(198,754)	—	80,378,962

**Noncontributory Retirement System
State and School Division**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions
ACTIVE RE ENTRY INC	\$ 76,869	0.0105182%	\$ 227,117	567,656	(57,837)	39,535	39,030	12,996
ALPINE SCHOOL DISTRICT	65,773,348	9.0000080	194,334,932	485,720,376	(49,489,261)	33,828,536	33,396,507	11,119,974
ALPINE UNISERV	44,528	0.0060929	131,562	328,827	(33,504)	22,902	22,609	7,528
AMERICAN LEADERSHIP ACADEMY	930,045	0.1272614	2,747,924	6,868,156	(699,785)	478,340	472,231	157,238
AMES CHARTER SCHOOL	400,693	0.0548282	1,183,892	2,959,017	(301,489)	206,084	203,452	67,743
BEAVER SCHOOL DISTRICT	1,510,541	0.2066928	4,463,066	11,154,979	(1,136,563)	776,901	766,979	255,380
BOX ELDER SCHOOL DISTRICT	11,087,382	1.5171271	32,758,948	81,877,655	(8,342,381)	5,702,460	5,629,633	1,874,489
CACHE COUNTY SCHOOL DISTRICT	15,942,242	2.1814353	47,103,189	117,729,626	(11,995,281)	8,199,411	8,094,695	2,695,276
CANYONS SCHOOL DISTRICT	30,985,901	4.2399143	91,551,414	228,823,438	(23,314,449)	15,936,663	15,733,133	5,238,633
CARBON SCHOOL DISTRICT	3,063,098	0.4191349	9,050,276	22,620,242	(2,304,744)	1,575,412	1,555,292	517,863
CITY OF ENTERPRISE	103	0.0000140	302	756	(77)	53	52	17
COLOR COUNTRY UNISERV	25,481	0.0034867	75,287	188,173	(19,173)	13,106	12,938	4,308
DAGGETT SCHOOL DISTRICT	358,368	0.0490368	1,058,839	2,646,461	(269,644)	184,316	181,962	60,587
DAVIS SCHOOL DISTRICT	61,226,682	8.3778710	180,901,283	452,144,337	(46,068,253)	31,490,096	31,087,931	10,351,292
DAVIS TECHNICAL COLLEGE	941,187	0.1287861	2,780,846	6,950,442	(708,169)	484,071	477,889	159,122
DAVIS UNISERV	42,548	0.0058221	125,715	314,212	(32,015)	21,884	21,604	7,194
DUCHESNE SCHOOL DISTRICT	4,251,380	0.5817319	12,561,192	31,395,421	(3,198,828)	2,186,569	2,158,644	718,760
EAST HOLLYWOOD HIGH SCHOOL	220,858	0.0302208	652,550	1,630,983	(166,178)	113,592	112,141	37,339
EDUCATORS MUTUAL INSURANCE	1,295,042	0.1772053	3,826,350	9,563,572	(974,417)	666,066	657,559	218,946
EMERY SCHOOL DISTRICT	2,517,428	0.3444689	7,438,031	18,590,602	(1,894,166)	1,294,763	1,278,228	425,609
ESPERANZA ELEMENTARY SCHOOL	239,333	0.0327488	707,137	1,767,416	(180,079)	123,094	121,522	40,463
FAST FORWARD CHARTER HS	250,430	0.0342673	739,925	1,849,368	(188,429)	128,801	127,156	42,339
GARFIELD SCHOOL DISTRICT	1,090,346	0.1491960	3,221,552	8,051,941	(820,399)	560,786	553,625	184,339
GRAND SCHOOL DISTRICT	1,706,285	0.2334772	5,041,415	12,600,504	(1,283,845)	877,576	866,368	288,473
GRANITE SCHOOL DISTRICT	58,534,122	8.0094382	172,945,805	432,260,431	(44,042,314)	30,105,259	29,720,780	9,896,074
GRANITE UNISERV	45,428	0.0062160	134,221	335,471	(34,181)	23,364	23,066	7,680
HEBER VALLEY HISTORIC RAILROAD	92,225	0.0126195	272,490	681,060	(69,392)	47,433	46,827	15,592
HIGH DESERT UNISERV	15,048	0.0020591	44,462	111,127	(11,323)	7,740	7,641	2,544
HIGH SCHOOL ACTIVITIES ASSN	149,031	0.0203924	440,328	1,100,555	(112,134)	76,649	75,670	25,196
INTECH COLLEGIATE HIGH SCHOOL	157,318	0.0215264	464,814	1,161,756	(118,369)	80,912	79,878	26,597
IRON SCHOOL DISTRICT	8,492,440	1.1620517	25,091,893	62,714,632	(6,389,892)	4,367,830	4,312,048	1,435,775
ITINERIS HIGH SCHOOL	302,402	0.0413788	893,482	2,233,168	(227,534)	155,531	153,545	51,126
JORDAN SCHOOL DISTRICT	46,517,856	6.3652085	137,442,363	343,523,191	(35,001,021)	23,925,055	23,619,505	7,864,544
JORDAN UNISERV	16,683	0.0022829	49,294	123,206	(12,553)	8,581	8,471	2,821
JUAB SCHOOL DISTRICT	2,198,625	0.3008458	6,496,088	16,236,312	(1,654,291)	1,130,796	1,116,354	371,711
KANE SCHOOL DISTRICT	1,475,615	0.2019138	4,359,874	10,897,062	(1,110,284)	758,938	749,246	249,475
LOGAN SCHOOL DISTRICT	4,992,672	0.6831656	14,751,425	36,869,684	(3,756,592)	2,567,830	2,535,036	844,086
MILLARD SCHOOL DISTRICT	3,532,281	0.4833350	10,436,532	26,085,050	(2,657,763)	1,816,722	1,793,521	597,185
MONTICELLO ACADEMY	538,791	0.0737247	1,591,919	3,978,840	(405,398)	277,111	273,572	91,091
MORGAN SCHOOL DISTRICT	2,467,331	0.3376139	7,290,013	18,220,645	(1,856,472)	1,268,997	1,252,791	417,139
MURRAY SCHOOL DISTRICT	6,234,526	0.8530931	18,420,627	46,040,481	(4,690,990)	3,206,541	3,165,589	1,054,041
NEBO SCHOOL DISTRICT	28,968,022	3.9638004	85,589,355	213,921,879	(21,796,153)	14,898,827	14,708,552	4,897,480
NOAH WEBSTER ACADEMY INC	282,564	0.0386643	834,869	2,086,669	(212,607)	145,328	143,472	47,772
NORTH SANPETE SCHOOL DISTRICT	2,582,468	0.3533685	7,630,198	19,070,903	(1,943,103)	1,328,214	1,311,251	436,605
NORTH SUMMIT SCHOOL DISTRICT	1,375,649	0.1882351	4,064,514	10,158,838	(1,035,068)	707,524	698,488	232,574
NUAMES CHARTER SCHOOL	958,063	0.1310953	2,830,708	7,075,067	(720,867)	492,751	486,458	161,975
OGDEN SCHOOL DISTRICT	10,224,117	1.3990033	30,208,330	75,502,645	(7,692,842)	5,258,466	5,191,309	1,728,541
OGDEN-WEBER TECH COLLEGE	620,006	0.0848377	1,831,879	4,578,596	(466,506)	318,881	314,809	104,821
PARK CITY SCHOOL DISTRICT	7,056,534	0.9655714	20,849,343	52,110,810	(5,309,486)	3,629,315	3,582,965	1,193,013
PIUTE SCHOOL DISTRICT	453,682	0.0620790	1,340,456	3,350,334	(341,360)	233,338	230,358	76,702
PROVO SCHOOL DISTRICT	12,481,796	1.7079299	36,878,905	92,175,068	(9,391,568)	6,419,635	6,337,649	2,110,236
RICH SCHOOL DISTRICT	794,239	0.1086786	2,346,670	5,865,263	(597,602)	408,493	403,276	134,278
SALT LAKE ARTS ACADEMY	392,105	0.0536532	1,158,520	2,895,603	(295,028)	201,668	199,092	66,291
SALT LAKE SCHOOL DISTRICT	27,522,211	3.7659649	81,317,543	203,244,918	(20,708,295)	14,155,219	13,974,440	4,653,044
SAN JUAN SCHOOL DISTRICT	3,954,212	0.5410693	11,683,175	29,200,906	(2,975,233)	2,033,730	2,007,757	668,519

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
4,501	96,062	—	—	—	18,754	18,754	64,817	(5,315)	—	59,502
5,497,812	83,842,829	—	—	—	—	—	55,461,291	5,695,016	—	61,156,307
19,697	72,736	—	—	—	—	—	37,547	13,044	—	50,591
15,650	1,123,459	—	—	—	165,689	165,689	784,231	(38,580)	—	745,651
—	477,279	—	—	—	34,486	34,486	337,871	(31,747)	—	306,124
15,955	1,815,215	—	—	—	82,191	82,191	1,273,715	(20,526)	—	1,253,189
162,144	13,368,726	—	—	—	283,523	283,523	9,349,084	364,555	—	9,713,639
602,138	19,591,520	—	—	—	—	—	13,442,790	652,378	—	14,095,168
425,817	37,334,246	—	—	—	168,704	168,704	26,127,879	702,489	—	26,830,368
—	3,648,567	—	—	—	202,969	202,969	2,582,860	(166,834)	—	2,416,026
130	252	—	—	—	—	—	86	66	—	152
3,613	33,965	—	—	—	—	—	21,486	3,355	—	24,841
21,498	448,363	—	—	—	19,880	19,880	302,182	524	—	302,706
3,156,524	76,085,843	—	—	—	1,489,161	1,489,161	51,627,458	934,235	—	52,561,693
26,610	1,147,692	—	—	—	160,137	160,137	793,626	(51,130)	—	742,496
34,016	84,698	—	—	—	—	—	35,878	26,984	—	62,862
49,705	5,113,678	—	—	—	179,423	179,423	3,584,841	51,474	—	3,636,315
—	263,072	—	—	—	35,041	35,041	186,231	(31,159)	—	155,072
—	1,542,571	—	—	—	313,451	313,451	1,092,003	(290,244)	—	801,759
325	2,998,925	—	—	—	200,504	200,504	2,122,741	(193,156)	—	1,929,585
304,044	589,123	—	—	—	—	—	201,810	174,116	—	375,926
35,332	333,628	—	—	—	907	907	211,167	17,042	—	228,209
38,714	1,337,464	—	—	—	11,517	11,517	919,399	(42,494)	—	876,905
—	2,032,417	—	—	—	234,524	234,524	1,438,771	(190,652)	—	1,248,119
—	69,722,113	—	—	—	6,943,076	6,943,076	49,357,043	(4,106,975)	—	45,250,068
—	54,110	—	—	—	22,503	22,503	38,305	(21,276)	—	17,029
23,570	133,422	—	—	—	5,066	5,066	77,766	21,380	—	99,146
5,523	23,448	—	—	—	—	—	12,689	2,978	—	15,667
12,077	189,592	—	—	—	—	—	125,665	7,513	—	133,178
35,299	222,686	—	—	—	—	—	132,653	22,619	—	155,272
554,523	10,670,176	—	—	—	83,114	83,114	7,160,981	270,117	—	7,431,098
5,636	365,838	—	—	—	7,983	7,983	254,991	22,627	—	277,618
523,770	55,932,874	—	—	—	520,167	520,167	39,224,707	2,742,137	—	41,966,844
620	20,493	—	—	—	37,502	37,502	14,068	(22,186)	—	(8,118)
29,435	2,648,296	—	—	—	27,253	27,253	1,853,920	8,167	—	1,862,087
26,018	1,783,677	—	—	—	—	—	1,244,266	13,253	—	1,257,519
409,075	6,356,027	—	—	—	91,187	91,187	4,209,912	53,529	—	4,263,441
68,659	4,276,087	—	—	—	30,048	30,048	2,978,484	(94,116)	—	2,884,368
253,299	895,073	—	—	—	—	—	454,318	211,045	—	665,363
281,985	3,220,912	—	—	—	—	—	2,080,498	382,337	—	2,462,835
59,476	7,485,647	—	—	—	221,753	221,753	5,257,067	120,442	—	5,377,509
1,429,153	35,934,012	—	—	—	—	—	24,426,366	1,541,905	—	25,968,271
49,394	385,966	—	—	—	—	—	238,263	47,520	—	285,783
267,145	3,343,215	—	—	—	—	—	2,177,584	179,987	—	2,357,571
29,563	1,668,149	—	—	—	33,007	33,007	1,159,972	(11,456)	—	1,148,516
164,468	1,305,652	—	—	—	—	—	807,856	272,103	—	1,079,959
—	12,178,316	—	—	—	199,539	199,539	8,621,162	(390,243)	—	8,230,919
56,761	795,272	—	—	—	157,541	157,541	522,800	(208,870)	—	313,930
—	8,405,293	—	—	—	631,077	631,077	5,950,199	(579,877)	—	5,370,322
42,397	582,795	—	—	—	8,002	8,002	382,553	2,951	—	385,504
722,847	15,590,367	—	—	—	473,583	473,583	10,524,879	136,720	—	10,661,599
32,096	978,143	—	—	—	9,314	9,314	669,717	(19,370)	—	650,347
22,277	489,328	—	—	—	2,655	2,655	330,630	63,562	—	394,192
24,594	32,807,297	—	—	—	923,782	923,782	23,207,232	(992,403)	—	22,214,829
176,173	4,886,179	—	—	—	192,839	192,839	3,334,264	(288,760)	—	3,045,504

**Noncontributory Retirement System
State and School Division**

Schedule of Employer Allocations and Pension Amounts (Concluded)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SEVIER SCHOOL DISTRICT	\$ 4,523,080	0.6189096%	\$ 13,363,961	33,401,860	(3,403,261)	2,326,310	2,296,600	764,695
SOLDIER HOLLOW CHARTER SCHOOL	207,845	0.0284401	614,100	1,534,880	(156,386)	106,898	105,533	35,139
SOUTH SANPETE SCHOOL DISTRICT	2,993,173	0.4095668	8,843,674	22,103,863	(2,252,127)	1,539,448	1,519,788	506,041
SOUTH SUMMIT SCHOOL DISTRICT	1,964,697	0.2688366	5,804,922	14,508,811	(1,478,279)	1,010,482	997,577	332,161
SOUTHERN UTAH UNIVERSITY	2,903,963	0.3973599	8,580,093	21,445,070	(2,185,003)	1,493,566	1,474,491	490,959
SOUTHWEST EDUC DEVELOPMENT CTR	103,313	0.0141367	305,250	762,942	(77,735)	53,136	52,457	17,467
SOUTHWEST TECHNICAL COLLEGE	464,078	0.0635015	1,371,172	3,427,105	(349,182)	238,685	235,636	78,459
STATE OF UTAH	174,487,431	23.8757542	515,543,219	1,288,547,775	(131,288,043)	89,742,344	88,596,231	29,499,724
SUCCESS ACADEMY	301,267	0.0412235	890,129	2,224,786	(226,680)	154,948	152,969	50,934
SUMMIT ACADEMY HIGH SCHOOL	261,857	0.0358309	773,688	1,933,754	(197,027)	134,678	132,958	44,271
SUMMIT ACADEMY INC	1,228,855	0.1681488	3,630,795	9,074,803	(924,617)	632,025	623,953	207,757
TINTIC SCHOOL DISTRICT	402,664	0.0550980	1,189,717	2,973,577	(302,973)	207,098	204,453	68,076
TOOELE SCHOOL DISTRICT	14,111,222	1.9308902	41,693,231	104,207,987	(10,617,583)	7,257,681	7,164,992	2,385,715
TOOELE TECHNICAL COLLEGE	327,904	0.0448683	968,830	2,421,492	(246,722)	168,648	166,494	55,437
UINTAH BASIN TECHNICAL COLLEGE	871,245	0.1192156	2,574,193	6,433,933	(655,543)	448,098	442,376	147,297
UINTAH SCHOOL DISTRICT	6,015,260	0.8230901	17,772,780	44,421,253	(4,526,009)	3,093,768	3,054,257	1,016,970
UTAH ARTS ACADEMY	199,539	0.0273036	589,560	1,473,545	(150,137)	102,627	101,316	33,735
UTAH CO ACADEMY OF SCIENCES	364,398	0.0498619	1,076,656	2,690,991	(274,181)	187,417	185,024	61,607
UTAH COMMUNICATIONS AUTHORITY	478,753	0.0655096	1,414,532	3,535,480	(360,224)	246,232	243,088	80,940
UTAH EDUCATION ASSOCIATION	388,157	0.0531129	1,146,854	2,866,444	(292,057)	199,637	197,087	65,624
UTAH HOUSING CORPORATION	1,296,023	0.1773396	3,829,250	9,570,820	(975,155)	666,570	658,058	219,112
UTAH RETIREMENT SYSTEMS	6,312,959	0.8638252	18,652,363	46,619,681	(4,750,004)	3,246,880	3,205,413	1,067,301
UTAH SAFETY COUNCIL	69,836	0.0095559	206,338	515,721	(52,546)	35,918	35,459	11,807
UTAH SCHOOL BOARD ASSOCIATION	169,494	0.0231925	500,790	1,251,673	(127,531)	87,174	86,061	28,656
UTAH SCHOOL BOARD RISK MGMT	214,837	0.0293969	634,760	1,586,518	(161,648)	110,495	109,084	36,321
UTAH SCHOOL EMPLOYEES ASSN	80,576	0.0110255	238,071	595,034	(60,627)	41,442	40,913	13,623
UTAH STATE FAIR CORP	116,245	0.0159063	343,461	858,445	(87,466)	59,787	59,024	19,653
WASATCH SCHOOL DISTRICT	8,327,002	1.1394142	24,603,087	61,492,911	(6,265,413)	4,282,742	4,228,047	1,407,805
WASATCH UNISERV	35,368	0.0048396	104,500	261,188	(26,612)	18,191	17,958	5,980
WASHINGTON SCHOOL DISTRICT	27,012,329	3.6961958	79,811,036	199,479,558	(20,324,648)	13,892,976	13,715,547	4,566,841
WAYNE SCHOOL DISTRICT	496,505	0.0679386	1,466,981	3,666,570	(373,581)	255,362	252,101	83,942
WEBER COUNTY SCHOOL DISTRICT	30,710,827	4.2022749	90,738,676	226,792,081	(23,107,477)	15,795,187	15,593,464	5,192,128
WOODLAND PEAKS UNISERV	40,794	0.0055819	120,529	301,249	(30,694)	20,981	20,713	6,897
WORKERS' COMPENSATION FUND	5,924,654	0.8106920	17,505,071	43,752,141	(4,457,835)	3,047,167	3,008,251	1,001,652
	\$730,814,329	100.0000000%	\$2,159,275,108	5,396,888,271	(549,880,189)	375,872,293	371,071,969	123,555,162
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
BRIDGERLAND TECHNICAL COLLEGE	\$ —	0.0000000%	\$ —	—	—	—	—	—
LIBERTY ACADEMY CHARTER	—	0.0000000	—	—	—	—	—	—
OGDEN WEBER/NEA/UEA UNISERV	—	0.0000000	—	—	—	—	—	—
PROVO CITY CORP	—	0.0000000	—	—	—	—	—	—
PROVO HOUSING AUTHORITY	—	0.0000000	—	—	—	—	—	—
UINTAH FIRE SUPPRESSION SSD	—	0.0000000	—	—	—	—	—	—
USU SPACE DYNAMICS LAB	—	0.0000000	—	—	—	—	—	—
UTAH DAIRY COMMISSION	—	0.0000000	—	—	—	—	—	—
WHITE CITY WATER IMP DIST	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$730,814,329	100.0000000%	\$2,159,275,108	5,396,888,271	(549,880,189)	375,872,293	371,071,969	123,555,162

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
136,428	5,524,033	—	—	—	6,686	6,686	3,813,944	(37,610)	—	3,776,334
22,527	270,097	—	—	—	3,245	3,245	175,258	28,937	—	204,195
—	3,565,277	—	—	—	316,014	316,014	2,523,898	(355,648)	—	2,168,250
208,939	2,549,159	—	—	—	2,154	2,154	1,656,668	194,234	—	1,850,902
16,257	3,475,273	—	—	—	225,943	225,943	2,448,675	(85,897)	—	2,362,778
17,473	140,533	—	—	—	1,707	1,707	87,115	5,714	—	92,829
76,656	629,436	—	—	—	—	—	391,319	67,498	—	458,817
5,695,205	213,533,504	—	—	—	6,374,919	6,374,919	147,131,002	(8,149,639)	—	138,981,363
17,892	376,743	—	—	—	—	—	254,034	46,996	—	301,030
8,092	319,999	—	—	—	56,396	56,396	220,803	1,741	—	222,544
7,846	1,471,581	—	—	—	61,731	61,731	1,036,193	6,037	—	1,042,230
—	479,627	—	—	—	6,980	6,980	339,534	(9,996)	—	329,538
1,408,223	18,216,611	—	—	—	—	—	11,898,841	1,439,342	—	13,338,183
19,169	409,748	—	—	—	23,063	23,063	276,495	23,049	—	299,544
143,396	1,181,167	—	—	—	—	—	734,649	100,507	—	835,156
158,553	7,323,548	—	—	—	523,291	523,291	5,072,178	132,451	—	5,204,629
4,296	241,974	—	—	—	97,710	97,710	168,255	(40,244)	—	128,011
23,082	457,130	—	—	—	6,310	6,310	307,267	24,474	—	331,741
6,682	576,942	—	—	—	86,487	86,487	403,694	(75,874)	—	327,820
32,828	495,176	—	—	—	4,862	4,862	327,301	44,661	—	371,962
17,372	1,561,112	—	—	—	4,987	4,987	1,092,830	17,230	—	1,110,060
87,031	7,606,625	—	—	—	341,683	341,683	5,323,202	(261,776)	—	5,061,426
—	83,184	—	—	—	25,065	25,065	58,887	(15,305)	—	43,582
15,175	217,066	—	—	—	26,502	26,502	142,921	(30,882)	—	112,039
23,027	278,927	—	—	—	6,919	6,919	181,154	(2,227)	—	178,927
16,756	112,734	—	—	—	6,912	6,912	67,943	(10,144)	—	57,799
9,596	148,060	—	—	—	8,408	8,408	98,020	139	—	98,159
1,121,954	11,040,548	—	—	—	—	—	7,021,481	1,132,981	—	8,154,462
1,462	43,591	—	—	—	486	486	29,823	2,863	—	32,686
1,600,274	33,775,638	—	—	—	—	—	22,777,290	1,441,027	—	24,218,317
—	591,405	—	—	—	126,893	126,893	418,662	(77,510)	—	341,152
797,393	37,378,172	—	—	—	—	—	25,895,931	793,742	—	26,689,673
2,536	51,127	—	—	—	4,264	4,264	34,398	3,168	—	37,566
—	7,057,070	—	—	—	802,332	802,332	4,995,776	(1,440,409)	—	3,555,367
27,416,178	897,915,602	—	—	—	23,373,799	23,373,799	616,236,015	1,874,433	—	618,110,448
—	—	—	—	—	409,179	409,179	—	(1,367,780)	—	(1,367,780)
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	7,641	7,641	—	(29,602)	—	(29,602)
—	—	—	—	—	—	—	—	—	—	—
88	88	—	—	—	90	90	—	27	—	27
—	—	—	—	—	—	—	—	(260)	—	(260)
—	—	—	—	—	—	—	—	(390,384)	—	(390,384)
—	—	—	—	—	2,782	2,782	—	(25,447)	—	(25,447)
—	—	—	—	—	—	—	—	—	—	—
27,416,266	897,915,690	—	—	—	23,793,490	23,793,490	616,236,015	60,986	—	616,297,001

**Noncontributory Retirement System
Higher Education Division**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
BRIDGERLAND TECHNICAL COLLEGE	\$ 1,010,132	2.0122338%	\$ (35,225)	5,361,093	(4,556,220)	244,404	684,243	7,705
DIXIE TECHNICAL COLLEGE	189,993	0.3784754	(6,625)	1,008,353	(856,967)	45,969	128,697	1,449
MOUNTAINLAND TECHNICAL COLLEGE	380,668	0.7583093	(13,275)	2,020,325	(1,717,009)	92,104	257,857	2,904
SALT LAKE COMMUNITY COLLEGE	3,775,857	7.5216967	(131,671)	20,039,679	(17,031,074)	913,579	2,557,690	28,802
SNOW COLLEGE	1,063,252	2.1180511	(37,078)	5,643,017	(4,795,818)	257,257	720,226	8,110
UNIVERSITY OF UTAH	16,682,836	33.2330431	(581,763)	88,541,128	(75,248,236)	4,036,459	11,300,620	127,258
UNIVERSITY OF UTAH HOSPITAL	8,430,042	16.7930641	(293,972)	44,740,917	(38,023,857)	2,039,672	5,710,342	64,304
USU SPACE DYNAMICS LAB	935,476	1.8635145	(32,622)	4,964,868	(4,219,481)	226,341	633,673	7,136
UTAH STATE UNIVERSITY	8,091,262	16.1181976	(282,158)	42,942,904	(36,495,784)	1,957,704	5,480,859	61,720
UTAH TECH UNIVERSITY	1,254,605	2.4992366	(43,750)	6,658,590	(5,658,920)	303,555	849,845	9,570
UTAH VALLEY UNIVERSITY	4,714,947	9.3924097	(164,419)	25,023,725	(21,266,854)	1,140,795	3,193,811	35,966
WEBER STATE UNIVERSITY	3,670,474	7.3117681	(127,996)	19,480,376	(16,555,741)	888,082	2,486,306	27,998
	\$ 50,199,545	100.0000000%	\$ (1,750,554)	266,424,975	(226,425,961)	12,145,921	34,004,169	382,922
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
NONE	\$ —	0.0000000%	—	—	—	—	—	—
GRAND TOTAL	\$ 50,199,545	100.0000000%	\$ (1,750,554)	266,424,975	(226,425,961)	12,145,921	34,004,169	382,922

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources			Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
12,391	948,743	38,747	—	—	—	38,747	(1,071,056)	35,618	—	(1,035,438)
43	176,158	7,288	—	—	—	7,288	(201,452)	1,235	—	(200,217)
20,429	373,294	14,602	—	—	—	14,602	(403,627)	24,529	—	(379,098)
703	3,500,774	144,835	—	—	46,554	191,389	(4,003,589)	(32,141)	—	(4,035,730)
13,946	999,539	40,784	—	—	—	40,784	(1,127,379)	22,179	—	(1,105,200)
3,181	15,467,518	639,925	—	—	429,297	1,069,222	(17,689,018)	(401,386)	—	(18,090,404)
344,796	8,159,114	323,361	—	—	—	323,361	(8,938,478)	425,639	—	(8,512,839)
59,455	926,605	35,883	—	—	—	35,883	(991,897)	72,240	—	(919,657)
1,497	7,501,780	310,366	—	—	73,112	383,478	(8,579,266)	(39,985)	—	(8,619,251)
19,928	1,182,898	48,124	—	—	—	48,124	(1,330,274)	29,195	—	(1,301,079)
876	4,371,448	180,857	—	—	54,180	235,037	(4,999,317)	(33,956)	—	(5,033,273)
95,519	3,497,905	140,793	—	—	—	140,793	(3,891,850)	127,744	—	(3,764,106)
572,765	47,105,777	1,925,565	—	—	603,143	2,528,708	(53,227,203)	230,912	—	(52,996,291)
—	—	—	—	—	—	—	—	—	—	—
572,765	47,105,777	1,925,565	—	—	603,143	2,528,708	(53,227,203)	230,912	—	(52,996,291)

**Contributory Retirement System
Local Government Division**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
BOX ELDER COUNTY	\$ 10,463	0.5246761%	\$ 53,962	276,832	(135,192)	—	16,087	—
CENTERVILLE CITY	16,632	0.8340881	85,784	440,086	(214,917)	—	25,574	—
CITY OF NAPLES	7,201	0.3611368	37,142	190,545	(93,053)	—	11,073	—
CITY OF OREM	57,313	2.8741268	295,597	1,516,461	(740,568)	—	88,124	—
CITY OF ST GEORGE	19,899	0.9979093	102,632	526,522	(257,128)	—	30,597	—
CORINNE CITY	27,229	1.3655027	140,438	720,473	(351,845)	—	41,868	—
DAVIS & WEBER COUNTY CANAL CO	104,174	5.2241286	537,288	2,756,381	(1,346,087)	—	160,177	—
DAVIS CO HOUSING AUTHORITY	24,801	1.2437082	127,912	656,212	(320,463)	—	38,133	—
DDI VANTAGE	601,060	30.1420808	3,100,035	15,903,716	(7,766,627)	—	924,185	—
DUCHESNE COUNTY	94,589	4.7434836	487,855	2,502,781	(1,222,240)	—	145,440	—
EMERY CO CARE & REHAB CTR	134,595	6.7496772	694,187	3,561,299	(1,739,170)	—	206,952	—
EMERY TOWN	3,062	0.1535363	15,791	81,010	(39,561)	—	4,708	—
FIVE-COUNTY ASSN OF GOVTS	13,397	0.6718165	69,095	354,467	(173,105)	—	20,599	—
GARLAND CITY	19,118	0.9587089	98,601	505,839	(247,028)	—	29,395	—
HONEYVILLE CITY	9,668	0.4848524	49,866	255,820	(124,931)	—	14,866	—
IRON COUNTY	8,589	0.4307475	44,301	227,273	(110,989)	—	13,207	—
JORDAN VALLEY WATER CONSERV	13,150	0.6594409	67,822	347,938	(169,916)	—	20,219	—
KEARNS IMPROVEMENT DIST	14,980	0.7512046	77,259	396,354	(193,561)	—	23,033	—
LAYTON CITY	21,576	1.0819943	111,280	570,887	(278,794)	—	33,175	—
LOGAN CITY	6,732	0.3375988	34,721	178,126	(86,988)	—	10,351	—
MOUNTAINLAND ASSN OF GOVT	5,176	0.2595501	26,694	136,945	(66,878)	—	7,958	—
MURRAY CITY	37,502	1.8806667	193,422	992,287	(484,586)	—	57,663	—
NORTH DAVIS CO SEWER DIST	14,452	0.7247645	74,540	382,404	(186,748)	—	22,222	—
OAKLEY CITY	29,185	1.4635605	150,523	772,211	(377,112)	—	44,874	—
OGDEN CITY CORP	57,864	2.9017715	298,440	1,531,047	(747,691)	—	88,971	—
PARK CITY	28,076	1.4079842	144,808	742,888	(362,791)	—	43,170	—
PROVO CITY CORP	36,683	1.8395722	189,195	970,604	(473,997)	—	56,403	—
PROVO HOUSING AUTHORITY	16,436	0.8242395	84,771	434,889	(212,379)	—	25,272	—
SALT LAKE CITY CORP	214,545	10.7590642	1,106,542	5,676,752	(2,772,258)	—	329,883	—
SALT LAKE COUNTY	81,827	4.1034906	422,033	2,165,104	(1,057,335)	—	125,817	—
SANDY CITY	63,892	3.2040664	329,530	1,690,546	(825,583)	—	98,240	—
SOUTH DAVIS SEWER DIST	53,742	2.6950887	277,183	1,421,996	(694,436)	—	82,634	—
TOWN OF PARAGONAH	8,783	0.4404748	45,302	232,406	(113,496)	—	13,505	—
UTAH COUNTY	5,714	0.2865484	29,471	151,190	(73,834)	—	8,786	—
UTAH LEAGUE CITIES/TOWNS	109,116	5.4719761	562,779	2,887,152	(1,409,949)	—	167,776	—
WEST VALLEY CITY	13,830	0.6935457	71,329	365,932	(178,704)	—	21,265	—
WESTERN UINTAH BASIN MAD	9,038	0.4532175	46,612	239,129	(116,779)	—	13,896	—
	\$ 1,994,089	100.0000000%	\$ 10,284,742	52,762,504	(25,766,719)	—	3,066,098	—
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
CARBON COUNTY	\$ —	0.0000000%	\$ —	—	—	—	—	—
GRAND COUNTY	—	0.0000000%	—	—	—	—	—	—
JUAB COUNTY	—	0.0000000%	—	—	—	—	—	—
CLINTON CITY	—	0.0000000%	—	—	—	—	—	—
VERNAL CITY	—	0.0000000%	—	—	—	—	—	—
CITY OF WEST JORDAN	—	0.0000000%	—	—	—	—	—	—
GARFIELD COUNTY	—	0.0000000%	—	—	—	—	—	—
WEBER COUNTY CORP	—	0.0000000%	—	—	—	—	—	—
TOWN OF MANILA	—	0.0000000%	—	—	—	—	—	—
WEBER RIVER WATER USERS	—	0.0000000%	—	—	—	—	—	—
GRAND TOTAL	\$ 1,994,089	100.0000000%	\$ 10,284,742	52,762,504	(25,766,719)	—	3,066,098	—

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Proportionate Share of Nonemployer Contributions
—	16,087	—	—	—	—	—	117,016	(8,503)	—	108,513
—	25,574	—	—	—	—	—	186,023	(1,147)	—	184,876
—	11,073	—	—	—	—	—	80,543	(3,695)	—	76,848
—	88,124	—	—	—	—	—	641,004	133,385	—	774,389
—	30,597	—	—	—	—	—	222,559	(14,051)	—	208,508
—	41,868	—	—	—	—	—	304,542	(16,237)	—	288,305
—	160,177	—	—	—	—	—	1,165,115	(111,694)	—	1,053,421
—	38,133	—	—	—	—	—	277,379	(4,807)	—	272,572
—	924,185	—	—	—	—	—	6,722,455	(336,755)	—	6,385,700
—	145,440	—	—	—	—	—	1,057,918	(19,022)	—	1,038,896
—	206,952	—	—	—	—	—	1,505,351	(123,263)	—	1,382,088
—	4,708	—	—	—	—	—	34,243	1,154	—	35,397
—	20,599	—	—	—	—	—	149,832	(7,677)	—	142,155
—	29,395	—	—	—	—	—	213,817	28,943	—	242,760
—	14,866	—	—	—	—	—	108,135	(2,655)	—	105,480
—	13,207	—	—	—	—	—	96,068	(6,794)	—	89,274
—	20,219	—	—	—	—	—	147,072	35,730	—	182,802
—	23,033	—	—	—	—	—	167,538	90,061	—	257,599
—	33,175	—	—	—	—	—	241,312	30,780	—	272,092
—	10,351	—	—	—	—	—	75,293	(3,727)	—	71,566
—	7,958	—	—	—	—	—	57,886	90,213	—	148,099
—	57,663	—	—	—	—	—	419,437	(12,600)	—	406,837
—	22,222	—	—	—	—	—	161,641	(10,820)	—	150,821
—	44,874	—	—	—	—	—	326,411	(35,156)	—	291,255
—	88,971	—	—	—	—	—	647,169	2,398	—	649,567
—	43,170	—	—	—	—	—	314,017	15,683	—	329,700
—	56,403	—	—	—	—	—	410,272	(21,682)	—	388,590
—	25,272	—	—	—	—	—	183,827	62,031	—	245,858
—	329,883	—	—	—	—	—	2,399,547	(42,344)	—	2,357,203
—	125,817	—	—	—	—	—	915,184	194,156	—	1,109,340
—	98,240	—	—	—	—	—	714,589	85,238	—	799,827
—	82,634	—	—	—	—	—	601,074	(28,109)	—	572,965
—	13,505	—	—	—	—	—	98,237	(6,126)	—	92,111
—	8,786	—	—	—	—	—	63,908	138,213	—	202,121
—	167,776	—	—	—	—	—	1,220,391	(182,975)	—	1,037,416
—	21,265	—	—	—	—	—	154,678	(9,974)	—	144,704
—	13,896	—	—	—	—	—	101,079	(2,626)	—	98,453
—	3,066,098	—	—	—	—	—	22,302,562	(104,454)	—	22,198,108
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	2,305	—	2,305
—	—	—	—	—	—	—	—	45,428	—	45,428
—	—	—	—	—	—	—	—	38,610	—	38,610
—	—	—	—	—	—	—	—	22,851	—	22,851
—	3,066,098	—	—	—	—	—	22,302,562	4,740	—	22,307,302

**Contributory Retirement System
State and School Division**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
ALPINE SCHOOL DISTRICT	\$ 54,354	4.6768470%	\$ 611,207	3,228,186	(1,640,933)	—	122,358	—
BOX ELDER SCHOOL DISTRICT	16,109	1.3860691	181,142	956,732	(486,321)	—	36,263	—
CACHE COUNTY SCHOOL DISTRICT	38,089	3.2773773	428,313	2,262,205	(1,149,911)	—	85,744	—
DAVIS SCHOOL DISTRICT	84,527	7.2731181	950,508	5,020,258	(2,551,869)	—	190,283	—
DUCHESNE SCHOOL DISTRICT	13,338	1.1476706	149,986	792,178	(402,675)	—	30,026	—
EMERY SCHOOL DISTRICT	10,119	0.8706621	113,785	600,973	(305,483)	—	22,779	—
GRANITE SCHOOL DISTRICT	148,666	12.7919029	1,671,745	8,829,591	(4,488,207)	—	334,668	—
JORDAN SCHOOL DISTRICT	43,374	3.7321097	487,741	2,576,083	(1,309,460)	—	97,641	—
MURRAY SCHOOL DISTRICT	12,386	1.0657198	139,277	735,611	(373,922)	—	27,882	—
PROVO SCHOOL DISTRICT	14,171	1.2193744	159,357	841,671	(427,833)	—	31,902	—
SALT LAKE SCHOOL DISTRICT	105,044	9.0384566	1,181,216	6,238,781	(3,171,261)	—	236,469	—
SAN JUAN SCHOOL DISTRICT	1,518	0.1306531	17,075	90,183	(45,841)	—	3,418	—
SOUTHERN UTAH UNIVERSITY	3,075	0.2645466	34,573	182,603	(92,820)	—	6,921	—
STATE OF UTAH	442,688	38.0910603	4,978,034	26,292,297	(13,364,746)	—	996,557	—
UINTAH SCHOOL DISTRICT	25,344	2.1807183	284,993	1,505,237	(765,134)	—	57,053	—
UTAH HOUSING CORPORATION	56,665	4.8756941	637,194	3,365,440	(1,710,701)	—	127,560	—
WASHINGTON SCHOOL DISTRICT	29,579	2.5451424	332,619	1,756,781	(892,997)	—	66,587	—
WORKERS' COMPENSATION FUND	63,140	5.4328776	710,011	3,750,035	(1,906,196)	—	142,138	—
	\$ 1,162,184	100.0000000%	\$ 13,068,776	69,024,845	(35,086,310)	—	2,616,249	—
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
CARBON SCHOOL DISTRICT	\$ —	0.0000000%	\$ —	—	—	—	—	—
EDUCATORS MUTUAL INSURANCE	—	0.0000000	—	—	—	—	—	—
IRON SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
JUAB SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
KANE SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
LOGAN SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
MILLARD SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
NEBO SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
NORTH SANPETE SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
OGDEN-WEBER TECH COLLEGE	—	0.0000000	—	—	—	—	—	—
PARK CITY SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
SEVIER SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
TOOELE SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
WEBER COUNTY SCHOOL DISTRICT	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$ 1,162,184	100.0000000%	\$ 13,068,776	69,024,845	(35,086,310)	—	2,616,249	—

Columns may not add to total due to rounding.

**Contributory Retirement System
Higher Education Division**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SALT LAKE COMMUNITY COLLEGE	\$ 40,000	7.0246501%	\$ (64,907)	905,269	(900,346)	—	118,911	—
UNIVERSITY OF UTAH	191,965	33.7118195	(311,493)	4,344,452	(4,320,826)	—	570,661	—
UNIVERSITY OF UTAH HOSPITAL	243,324	42.7312342	(394,832)	5,506,785	(5,476,840)	—	723,337	—
UTAH STATE UNIVERSITY	14,427	2.5335377	(23,410)	326,498	(324,722)	—	42,887	—
UTAH VALLEY UNIVERSITY	72,989	12.8179547	(118,436)	1,651,853	(1,642,871)	—	216,977	—
WEBER STATE UNIVERSITY	6,724	1.1808038	(10,910)	152,171	(151,343)	—	19,988	—
	\$ 569,429	100.0000000%	\$ (923,988)	12,887,028	(12,816,948)	—	1,692,761	—
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
SNOW COLLEGE	\$ —	0.0000000%	\$ —	—	—	—	—	—
UTAH TECH UNIVERSITY	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$ 569,429	100.0000000%	\$ (923,988)	12,887,028	(12,816,948)	—	1,692,761	—

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
—	118,911	—	—	—	—	—	534,760	(37,575)	—	497,185
—	570,661	—	—	—	—	—	2,566,353	(47,690)	—	2,518,663
—	723,337	—	—	—	—	—	3,252,966	(14,578)	—	3,238,388
—	42,887	—	—	—	—	—	192,869	(34,944)	—	157,925
—	216,977	—	—	—	—	—	975,782	34,458	—	1,010,240
—	19,988	—	—	—	—	—	89,890	31,512	—	121,402
—	1,692,761	—	—	—	—	—	7,612,620	(68,817)	—	7,543,803
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	66,145	—	66,145
—	1,692,761	—	—	—	—	—	7,612,620	(2,672)	—	7,609,948

**Public Safety Retirement System
Other Division A with Social Security**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
AMERICAN FORK CITY	\$ 620,938	1.0091230%	\$ 1,304,872	4,202,346	(1,051,458)	5,777	302,449	34,997
BEAVER COUNTY	867,216	1.4093649	1,822,414	5,869,095	(1,468,491)	8,068	422,408	48,878
BIG WATER MUNICIPAL CORP	6,965	0.0113199	14,637	47,140	(11,795)	65	3,393	393
BLANDING CITY	67,729	0.1100701	142,329	458,371	(114,688)	630	32,990	3,817
BOX ELDER COUNTY	1,227,731	1.9952583	2,580,018	8,308,963	(2,078,963)	11,423	598,009	69,198
BRIGHAM CITY	432,319	0.7025866	908,497	2,925,820	(732,061)	4,022	210,576	24,366
CACHE COUNTY	1,893,289	3.0768976	3,978,659	12,813,292	(3,205,979)	17,615	922,192	106,710
CARBON COUNTY	642,783	1.0446252	1,350,779	4,350,190	(1,088,449)	5,980	313,090	36,229
CEDAR CITY	644,736	1.0477991	1,354,883	4,363,407	(1,091,756)	5,999	314,041	36,339
CENTERVILLE CITY	446,580	0.7257636	938,467	3,022,337	(756,211)	4,155	217,522	25,170
CITY OF DRAPER	918,998	1.4935183	1,931,231	6,219,540	(1,556,174)	8,550	447,630	51,797
CITY OF HARRISVILLE	155,317	0.2524143	326,391	1,051,143	(263,004)	1,445	75,652	8,754
CITY OF HELPER	44,129	0.0717165	92,735	298,653	(74,725)	411	21,495	2,487
CITY OF KANAB	102,049	0.1658458	214,451	690,641	(172,803)	949	49,706	5,752
CITY OF MOAB	248,030	0.4030882	521,223	1,678,602	(419,999)	2,308	120,812	13,979
CITY OF NAPLES	56,847	0.0923848	119,460	384,723	(96,261)	529	27,689	3,204
CITY OF NORTH SALT LAKE	539,704	0.8771052	1,134,163	3,652,577	(913,901)	5,021	262,882	30,419
CITY OF SOUTH JORDAN	1,002,501	1.6292235	2,106,708	6,784,664	(1,697,573)	9,327	488,303	56,503
CITY OF SOUTH SALT LAKE	1,409,488	2.2906424	2,961,972	9,539,047	(2,386,739)	13,114	686,540	79,442
CITY OF ST GEORGE	2,362,205	3.8389609	4,964,064	15,986,794	(4,000,013)	21,978	1,150,594	133,139
CLEARFIELD CITY	453,040	0.7362625	952,042	3,066,058	(767,150)	4,215	220,669	25,534
CLINTON CITY	320,152	0.5202979	672,784	2,166,705	(542,125)	2,979	155,941	18,044
DAGGETT COUNTY	23,315	0.0378911	48,996	157,792	(39,481)	217	11,357	1,314
DAVIS COUNTY	3,109,682	5.0537300	6,534,851	21,045,523	(5,265,744)	28,932	1,514,679	175,268
DUCHESNE COUNTY	470,189	0.7641328	988,081	3,182,120	(796,190)	4,375	229,022	26,501
EAST CARBON CITY	32,606	0.0529905	68,521	220,671	(55,214)	303	15,882	1,838
EMERY COUNTY	469,990	0.7638088	987,662	3,180,771	(795,852)	4,373	228,925	26,490
ENOCH CITY	82,809	0.1345779	174,019	560,430	(140,224)	770	40,335	4,667
EPHRAIM CITY	165,519	0.2689948	347,830	1,120,190	(280,280)	1,540	80,622	9,329
FAIRVIEW CITY	30,215	0.0491048	63,496	204,490	(51,165)	281	14,717	1,703
FARMINGTON CITY	405,565	0.6591081	852,276	2,744,760	(686,759)	3,773	197,545	22,859
FOUNTAIN GREEN CITY	661	0.0010746	1,390	4,475	(1,120)	6	322	37
GARFIELD COUNTY	359,179	0.5837226	754,797	2,430,828	(608,211)	3,342	174,950	20,244
GARLAND CITY	39,986	0.0649841	84,029	270,617	(67,710)	372	19,477	2,254
GRAND COUNTY	472,874	0.7684953	993,722	3,200,287	(800,735)	4,400	230,330	26,652
GRANTSVILLE CITY	226,501	0.3681007	475,982	1,532,902	(383,543)	2,107	110,325	12,766
HEBER CITY	340,666	0.5536366	715,894	2,305,539	(576,863)	3,170	165,933	19,201
HURRICANE CITY	512,082	0.8322154	1,076,117	3,465,640	(867,128)	4,764	249,427	28,862
IRON COUNTY	1,049,212	1.7051365	2,204,869	7,100,793	(1,776,670)	9,762	511,055	59,136
IVINS CITY	184,475	0.2998011	387,665	1,248,478	(312,378)	1,716	89,855	10,397

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
44,885	388,108	—	—	—	—	—	385,590	47,867	—	433,457
—	479,354	—	—	—	101,691	101,691	538,525	(111,862)	—	426,663
383	4,234	—	—	—	23	23	4,325	158	—	4,483
3,207	40,644	—	—	—	1,794	1,794	42,058	(2,223)	—	39,835
—	678,630	—	—	—	106,993	106,993	762,397	(6,304)	—	756,093
—	238,964	—	—	—	56,400	56,400	268,462	(68,262)	—	200,200
169,583	1,216,100	—	—	—	—	—	1,175,696	100,557	—	1,276,253
—	355,299	—	—	—	21,582	21,582	399,156	(53,866)	—	345,290
94,738	451,117	—	—	—	—	—	400,369	99,048	—	499,417
27,069	273,916	—	—	—	—	—	277,318	31,239	—	308,557
69,942	577,919	—	—	—	—	—	570,680	150,284	—	720,964
22,876	108,727	—	—	—	2,623	2,623	96,449	26,182	—	122,631
885	25,278	—	—	—	596	596	27,403	(10,691)	—	16,712
8,742	65,149	—	—	—	—	—	63,370	7,105	—	70,475
53,968	191,067	—	—	—	844	844	154,022	23,208	—	177,230
2,280	33,702	—	—	—	17,251	17,251	35,301	(16,024)	—	19,277
48,736	347,058	—	—	—	—	—	335,146	81,822	—	416,968
16,123	570,256	—	—	—	34,214	34,214	622,534	(89,304)	—	533,230
140,096	919,192	—	—	—	—	—	875,265	230,968	—	1,106,233
25,890	1,331,601	—	—	—	—	—	1,466,884	62,868	—	1,529,752
29,502	279,920	—	—	—	9,624	9,624	281,329	(21,455)	—	259,874
20,671	197,635	—	—	—	—	—	198,808	47,153	—	245,961
—	12,888	—	—	—	4,203	4,203	14,478	(18,647)	—	(4,169)
—	1,718,879	—	—	—	334,271	334,271	1,931,053	(265,836)	—	1,665,217
2,581	262,479	—	—	—	71,983	71,983	291,979	(54,024)	—	237,955
3,357	21,380	—	—	—	927	927	20,248	506	—	20,754
5,250	265,038	—	—	—	20,539	20,539	291,855	(63,990)	—	227,865
13,716	59,488	—	—	—	—	—	51,423	15,506	—	66,929
6,845	98,336	—	—	—	—	—	102,784	20,665	—	123,449
4,379	21,080	—	—	—	—	—	18,763	5,418	—	24,181
61,161	285,338	—	—	—	—	—	251,848	96,974	—	348,822
—	365	—	—	—	13,100	13,100	411	(12,859)	—	(12,448)
—	198,536	—	—	—	84,189	84,189	223,043	(162,164)	—	60,879
1,609	23,712	—	—	—	5,110	5,110	24,831	4,907	—	29,738
67,733	329,115	—	—	—	—	—	293,646	96,476	—	390,122
29,669	154,867	—	—	—	693	693	140,653	17,522	—	158,175
—	188,304	—	—	—	50,722	50,722	211,547	(4,773)	—	206,774
43,351	326,404	—	—	—	895	895	317,993	40,894	—	358,887
6,299	586,252	—	—	—	16,403	16,403	651,540	(16,158)	—	635,382
17,353	119,321	—	—	—	—	—	114,555	24,026	—	138,581

**Public Safety Retirement System
Other Division A with Social Security**

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions
JUAB COUNTY	\$ 275,754	0.4481441%	\$ 579,484	1,866,231	(466,945)	2,566	134,315	15,542
KAMAS CITY	51,786	0.0841597	108,825	350,471	(87,690)	482	25,224	2,919
KANE COUNTY	696,091	1.1312589	1,462,802	4,710,963	(1,178,717)	6,476	339,055	39,233
KAYSVILLE CITY	639,948	1.0400172	1,344,820	4,331,000	(1,083,648)	5,954	311,709	36,069
LAVERKIN CITY	91,026	0.1479311	191,286	616,038	(154,137)	847	44,337	5,130
LAYTON CITY	1,383,949	2.2491376	2,908,303	9,366,206	(2,343,493)	12,876	674,100	78,002
LEHI CITY	1,048,693	1.7042929	2,203,778	7,097,280	(1,775,791)	9,757	510,802	59,107
LINDON CITY	269,171	0.4374458	565,650	1,821,679	(455,798)	2,504	131,109	15,171
MAPLETON CITY	173,430	0.2818517	364,455	1,173,730	(293,676)	1,614	84,475	9,775
MILLARD COUNTY	616,546	1.0019865	1,295,644	4,172,627	(1,044,022)	5,736	300,310	34,750
MORGAN COUNTY	237,033	0.3852160	498,113	1,604,176	(401,377)	2,205	115,455	13,360
MORONI CITY	3,404	0.0055320	7,153	23,037	(5,764)	32	1,658	192
MOUNT PLEASANT CITY	85,264	0.1385669	179,177	577,042	(144,380)	793	41,531	4,806
MURRAY CITY	1,521,538	2.4727429	3,197,442	10,297,378	(2,576,479)	14,156	741,118	85,757
NEPHI CITY	132,603	0.2155008	278,659	897,422	(224,541)	1,234	64,589	7,474
NORTH OGDEN CITY	335,679	0.5455320	705,414	2,271,789	(568,418)	3,123	163,504	18,920
NORTH PARK POLICE AGENCY	151,048	0.2454773	317,421	1,022,254	(255,776)	1,405	73,573	8,513
PARK CITY	968,874	1.5745754	2,036,044	6,557,090	(1,640,632)	9,014	471,924	54,608
PAROWAN CITY	90,024	0.1463034	189,181	609,259	(152,441)	838	43,849	5,074
PAYSON CITY	440,396	0.7157143	925,472	2,980,488	(745,740)	4,097	214,510	24,822
PERRY CITY	100,968	0.1640889	212,179	683,324	(170,973)	939	49,180	5,691
PIUTE COUNTY	57,963	0.0941989	121,806	392,278	(98,151)	539	28,233	3,267
PLEASANT GROVE CITY	400,466	0.6508207	841,560	2,710,248	(678,124)	3,726	195,061	22,571
PLEASANT VIEW CITY	195,262	0.3173324	410,335	1,321,485	(330,645)	1,817	95,109	11,005
PRICE CITY	219,236	0.3562940	460,715	1,483,734	(371,241)	2,040	106,787	12,357
RICH COUNTY	98,623	0.1602779	207,251	667,454	(167,002)	918	48,038	5,559
RICHFIELD CITY	161,000	0.2616510	338,334	1,089,607	(272,628)	1,498	78,421	9,074
RIVERDALE CITY	440,484	0.7158572	925,657	2,981,083	(745,889)	4,098	214,553	24,827
ROOSEVELT CITY	208,302	0.3385232	437,736	1,409,731	(352,725)	1,938	101,460	11,740
ROY CITY	691,525	1.1238388	1,453,208	4,680,063	(1,170,986)	6,434	336,831	38,976
SALEM CITY	225,874	0.3670809	474,663	1,528,655	(382,481)	2,102	110,020	12,731
SALINA CITY	39,716	0.0645455	83,462	268,790	(67,253)	370	19,345	2,239
SALT LAKE COUNTY	8,925,695	14.5056797	18,756,930	60,406,789	(15,114,217)	83,041	4,347,570	503,070
SAN JUAN COUNTY	392,625	0.6380791	825,084	2,657,188	(664,848)	3,653	191,242	22,129
SANPETE COUNTY	594,662	0.9664207	1,249,654	4,024,518	(1,006,964)	5,533	289,651	33,516
SANTAQUIN CITY	234,059	0.3803828	491,863	1,584,049	(396,341)	2,178	114,006	13,192
SEVIER COUNTY	750,008	1.2188829	1,576,107	5,075,860	(1,270,017)	6,978	365,317	42,272
SMITHFIELD CITY CORP	179,250	0.2913098	376,685	1,213,117	(303,531)	1,668	87,310	10,103
SOUTH OGDEN CITY	452,041	0.7346382	949,942	3,059,294	(765,458)	4,206	220,182	25,478
SPANISH FORK CITY	763,007	1.2400088	1,603,424	5,163,836	(1,292,030)	7,099	371,649	43,005
SPRING CITY	15,374	0.0249847	32,307	104,045	(26,033)	143	7,488	866
SPRINGVILLE CITY	433,287	0.7041606	910,532	2,932,374	(733,702)	4,031	211,047	24,421
STOCKTON TOWN	27,546	0.0447659	57,886	186,421	(46,644)	256	13,417	1,553
SUMMIT COUNTY	2,033,297	3.3044331	4,272,879	13,760,831	(3,443,061)	18,918	990,388	114,601
SUNSET CITY	124,874	0.2029404	262,417	845,116	(211,454)	1,162	60,824	7,038

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
—	152,423	—	—	—	25,618	25,618	171,238	(22,065)	—	149,173
673	29,298	—	—	—	365	365	32,158	1,793	—	33,951
40,895	425,659	—	—	—	—	—	432,259	47,311	—	479,570
65,804	419,536	—	—	—	—	—	397,395	124,348	—	521,743
1,231	51,545	—	—	—	7,039	7,039	56,525	(2,381)	—	54,144
124,028	889,006	—	—	—	9,409	9,409	859,406	26,437	—	885,843
73,634	653,300	—	—	—	—	—	651,218	130,715	—	781,933
17,893	166,677	—	—	—	19,195	19,195	167,150	(46,729)	—	120,421
25,158	121,022	—	—	—	—	—	107,697	29,178	—	136,875
—	340,796	—	—	—	63,590	63,590	382,864	(122,981)	—	259,883
11,877	142,897	—	—	—	3,373	3,373	147,193	56,599	—	203,792
2,858	4,740	—	—	—	14,842	14,842	2,114	(9,423)	—	(7,309)
3,595	50,725	—	—	—	4,887	4,887	52,947	(10,624)	—	42,323
—	841,031	—	—	—	104,792	104,792	944,846	(181,696)	—	763,150
1,369	74,666	—	—	—	—	—	82,344	(12,670)	—	69,674
15,201	200,748	—	—	—	6,381	6,381	208,450	10,756	—	219,206
20,876	104,367	—	—	—	—	—	93,798	6,785	—	100,583
124,283	659,829	—	—	—	1,021	1,021	601,652	118,477	—	720,129
5,778	55,539	—	—	—	—	—	55,903	20,474	—	76,377
11,443	254,872	—	—	—	—	—	273,478	62,986	—	336,464
4,387	60,197	—	—	—	2,844	2,844	62,699	(5,426)	—	57,273
1,839	33,878	—	—	—	6	6	35,994	4,567	—	40,561
14,602	235,960	—	—	—	34,017	34,017	248,682	19,090	—	267,772
6,690	114,621	—	—	—	2,740	2,740	121,254	30,543	—	151,797
4,669	125,853	—	—	—	9,619	9,619	136,142	(71,443)	—	64,699
5,865	60,380	—	—	—	—	—	61,243	3,103	—	64,346
—	88,993	—	—	—	25,507	25,507	99,978	(52,782)	—	47,196
—	243,478	—	—	—	13,406	13,406	273,532	(18,495)	—	255,037
50,490	165,628	—	—	—	10,981	10,981	129,351	12,006	—	141,357
52,778	435,019	—	—	—	25,839	25,839	429,424	(45,551)	—	383,873
31,295	156,148	—	—	—	—	—	140,263	45,021	—	185,284
68	22,022	—	—	—	7,124	7,124	24,663	(6,753)	—	17,910
7,890	4,941,571	—	—	—	192,084	192,084	5,542,683	(242,045)	—	5,300,638
4,284	221,308	—	—	—	13,930	13,930	243,813	(1,943)	—	241,870
9,413	338,113	—	—	—	22,544	22,544	369,274	81,555	—	450,829
19,203	148,579	—	—	—	—	—	145,346	8,502	—	153,848
2,296	416,863	—	—	—	—	—	465,741	7,455	—	473,196
35,464	134,545	—	—	—	—	—	111,311	62,876	—	174,187
11,549	261,415	—	—	—	2,922	2,922	280,709	(5,545)	—	275,164
25,018	446,771	—	—	—	75,736	75,736	473,813	18,449	—	492,262
15,037	23,534	—	—	—	—	—	9,547	14,600	—	24,147
26,887	266,386	—	—	—	11,020	11,020	269,063	20,246	—	289,309
7,197	22,423	—	—	—	—	—	17,105	9,373	—	26,478
84,600	1,208,507	—	—	—	26,520	26,520	1,262,639	(42,299)	—	1,220,340
18,981	88,005	—	—	—	282	282	77,544	17,283	—	94,827

**Public Safety Retirement System
Other Division A with Social Security**

Schedule of Employer Allocations and Pension Amounts (Concluded)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SYRACUSE CITY CORP	\$ 474,364	0.7709177%	\$ 996,854	3,210,375	(803,259)	4,413	231,056	26,736
TOOELE CITY	652,383	1.0602273	1,370,953	4,415,162	(1,104,706)	6,070	317,766	36,770
TOOELE COUNTY	872,620	1.4181467	1,833,770	5,905,665	(1,477,641)	8,119	425,040	49,183
TOWN OF BRIAN HEAD	124,771	0.2027732	262,201	844,419	(211,280)	1,161	60,774	7,032
TOWN OF SPRINGDALE	263,435	0.4281243	553,597	1,782,861	(446,085)	2,451	128,315	14,848
TREMONTON CITY	171,734	0.2790947	360,890	1,162,249	(290,803)	1,598	83,649	9,679
UINTAH COUNTY	930,771	1.5126520	1,955,972	6,299,219	(1,576,111)	8,660	453,364	52,460
UNIFIED FIRE AUTHORITY	31,544	0.0512641	66,288	213,482	(53,415)	293	15,365	1,778
VERNAL CITY	261,265	0.4245970	549,036	1,768,172	(442,410)	2,431	127,258	14,725
WASATCH COUNTY	1,237,673	2.0114163	2,600,912	8,376,250	(2,095,799)	11,515	602,852	69,758
WASHINGTON CITY	382,161	0.6210725	803,093	2,586,366	(647,128)	3,556	186,145	21,539
WASHINGTON COUNTY	2,130,052	3.4616749	4,476,205	14,415,641	(3,606,899)	19,818	1,037,516	120,054
WAYNE COUNTY	65,172	0.1059156	136,957	441,070	(110,359)	606	31,744	3,673
WEBER AREA DISPATCH 911	867,458	1.4097571	1,822,921	5,870,728	(1,468,899)	8,071	422,525	48,892
WEBER COUNTY CORP	3,424,550	5.5654411	7,196,532	23,176,469	(5,798,922)	31,862	1,668,046	193,015
WELLINGTON CITY	44,153	0.0717557	92,785	298,816	(74,766)	411	21,506	2,489
WEST BOUNTIFUL CITY	136,845	0.2223956	287,574	926,134	(231,726)	1,273	66,655	7,713
WILLARD CITY CORP	45,791	0.0744173	96,227	309,900	(77,539)	426	22,304	2,581
	\$ 61,532,414	100.0000000%	\$ 129,307,482	416,435,442	(104,195,195)	572,491	29,971,497	3,468,099
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
CENTERFIELD CITY	\$ —	0.0000000%	\$ —	—	—	—	—	—
CITY OF MONTICELLO	—	0.0000000	—	—	—	—	—	—
CITY OF TAYLORSVILLE	—	0.0000000	—	—	—	—	—	—
ESCALANTE CITY	—	0.0000000	—	—	—	—	—	—
GUNNISON CITY	—	0.0000000	—	—	—	—	—	—
NORTH LOGAN CITY	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$ 61,532,414	100.0000000%	\$ 129,307,482	416,435,442	(104,195,195)	572,491	29,971,497	3,468,099

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
37,239	299,444	—	—	—	—	—	294,571	51,224	—	345,795
78,068	438,674	—	—	—	—	—	405,118	102,287	—	507,405
—	482,342	—	—	—	67,775	67,775	541,880	(131,947)	—	409,933
7,222	76,189	—	—	—	5,417	5,417	77,481	16,684	—	94,165
43,015	188,629	—	—	—	—	—	163,588	53,816	—	217,404
—	94,926	—	—	—	18,077	18,077	106,643	(29,692)	—	76,951
15,065	529,549	—	—	—	5,739	5,739	577,991	(66)	—	577,925
266	17,702	—	—	—	13,882	13,882	19,588	(43,382)	—	(23,794)
—	144,414	—	—	—	30,120	30,120	162,240	(99,119)	—	63,121
48,124	732,249	—	—	—	—	—	768,571	157,818	—	926,389
18,522	229,762	—	—	—	1,882	1,882	237,315	81,383	—	318,698
—	1,177,388	—	—	—	206,055	206,055	1,322,722	(262,329)	—	1,060,393
—	36,023	—	—	—	10,804	10,804	40,471	(11,535)	—	28,936
383,036	862,524	—	—	—	—	—	538,675	1,065,411	—	1,604,086
—	1,892,923	—	—	—	306,845	306,845	2,126,580	(935,659)	—	1,190,921
17,771	42,177	—	—	—	—	—	27,418	20,660	—	48,078
11,636	87,277	—	—	—	6,059	6,059	84,978	(15,488)	—	69,490
1,347	26,658	—	—	—	571	571	28,435	2,791	—	31,226
2,691,288	36,703,375	—	—	—	2,367,527	2,367,527	38,210,450	365,440	—	38,575,890
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	7,265	7,265	—	(36,970)	—	(36,970)
—	—	—	—	—	924	924	—	(1,147)	—	(1,147)
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
2,691,288	36,703,375	—	—	—	2,375,716	2,375,716	38,210,450	327,324	—	38,537,774

**Public Safety Retirement System
State of Utah**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SNOW COLLEGE	\$ 34,040	0.0602599%	\$ 47,538	178,727	(60,323)	3,071	15,248	972
SOUTHERN UTAH UNIVERSITY	100,311	0.1775761	140,088	526,680	(177,763)	9,050	44,933	2,865
STATE OF UTAH	54,508,187	96.4933644	76,122,512	286,193,552	(96,595,188)	4,917,784	24,416,179	1,556,779
UNIVERSITY OF UTAH	1,468,289	2.5992446	2,050,514	7,709,204	(2,601,987)	132,470	657,699	41,935
UTAH STATE UNIVERSITY	225,904	0.3999075	315,482	1,186,102	(400,329)	20,381	101,191	6,452
UTAH TECH UNIVERSITY	152,321	0.2696475	212,722	799,758	(269,932)	13,743	68,230	4,350
GRAND TOTAL	\$ 56,489,052	100.0000000%	\$ 78,888,856	296,594,023	(100,105,522)	5,096,499	25,303,480	1,613,353

Columns may not add to total due to rounding.

**Public Safety Retirement System
Salt Lake City**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SALT LAKE CITY CORP	\$ 16,505,799	100.0000000%	\$ 62,282,792	122,001,965	13,241,318	1,783,690	6,281,381	1,047,161

**Public Safety Retirement System
Ogden City**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
OGDEN CITY CORP	\$ 3,517,070	100.0000000%	\$ 12,415,057	24,553,389	2,462,350	306,301	1,214,375	—

**Public Safety Retirement System
Provo City**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
PROVO CITY CORP	\$ 2,551,891	100.0000000%	\$ 8,985,869	19,154,981	665,680	180,830	995,105	183,167

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
4,150	23,441	—	—	—	1,271	1,271	15,060	2,046	—	17,106
2,815	59,663	—	—	—	—	—	44,379	11,936	—	56,315
160,819	31,051,561	—	—	—	—	—	24,114,943	455,865	—	24,570,808
165,117	997,221	—	—	—	19,486	19,486	649,585	159,538	—	809,123
16,391	144,415	—	—	—	658	658	99,942	29,948	—	129,890
4,900	91,223	—	—	—	6,826	6,826	67,388	28,231	—	95,619
354,193	32,367,525	—	—	—	28,241	28,241	24,991,297	687,564	—	25,678,861

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
—	9,112,232	155,194	—	—	—	155,194	8,808,230	—	—	8,808,230

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
—	1,520,676	—	—	—	—	—	2,414,415	—	—	2,414,415

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
—	1,359,102	1,093,885	—	—	—	1,093,885	760,932	—	—	760,932

**Public Safety Retirement System
Logan City**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
LOGAN CITY	\$1,132,937.00	100.00000000%	\$3,226,301.00	8,703,941.00	(1,238,683.00)	—	602,603.00	—

**Public Safety Retirement System
Bountiful City**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
CITY OF BOUNTIFUL	\$ 1,244,459	100.00000000%	\$ 4,690,801	8,519,447	1,524,964	—	369,494	40,008

**Public Safety Retirement System
Other Division B without Social Security**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
CITY OF OREM	\$ 1,992,575	7.4062483%	\$ 3,441,499	11,356,992	(3,014,948)	1,187,685	973,994	254,108
CITY OF RIVERTON	694,323	2.5807451	1,199,208	3,957,402	(1,050,574)	413,855	339,393	88,545
CITY OF SARATOGA SPRINGS	557,438	2.0719538	962,785	3,177,204	(843,454)	332,264	272,482	71,089
CITY OF TAYLORSVILLE	1,256,998	4.6721660	2,171,039	7,164,458	(1,901,953)	749,241	614,436	160,302
CITY OF WENDOVER	17,999	0.0668992	31,086	102,586	(27,233)	10,728	8,798	2,295
CITY OF WEST JORDAN	1,950,631	7.2503448	3,369,054	11,117,925	(2,951,482)	1,162,684	953,492	248,759
COTTONWOOD HEIGHTS CITY	564,496	2.0981894	974,976	3,217,435	(854,134)	336,471	275,933	71,989
GUNNISON VALLEY POLICE DEPT	68,400	0.2542358	118,137	389,854	(103,495)	40,770	33,435	8,723
HERRIMAN CITY	855,129	3.1784507	1,476,947	4,873,944	(1,293,889)	509,705	417,998	109,052
LONE PEAK PS DISTRICT	359,399	1.3358570	620,739	2,048,448	(543,803)	214,222	175,678	45,833
SANDY CITY	2,216,319	8.2378866	3,827,940	12,632,255	(3,353,493)	1,321,049	1,083,363	282,641
TOWN OF MANTUA	15,055	0.0559581	26,002	85,808	(22,780)	8,974	7,359	1,920
UNIFIED POLICE DEPARTMENT	7,177,183	26.6770422	12,396,158	40,907,480	(10,859,735)	4,277,999	3,508,292	915,288
UTAH COUNTY	5,531,648	20.5607127	9,554,050	31,528,494	(8,369,889)	3,297,169	2,703,936	705,437
WEST VALLEY CITY	3,347,789	12.4434773	5,782,173	19,081,250	(5,065,511)	1,995,468	1,636,440	426,935
WOODS CROSS CITY	298,589	1.1098330	515,712	1,701,856	(451,793)	177,976	145,954	38,078
	\$ 26,903,970	100.00000000%	\$ 46,467,505	153,343,391	(40,708,166)	16,036,260	13,150,983	3,430,994

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
—	602,603	187,540	—	—	—	187,540	36,350	—	—	36,350

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
—	409,502	385,932	—	—	—	385,932	636,758	—	—	636,758

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
81,603	2,497,390	—	—	28,050	29,817	57,867	2,039,855	38,322	—	2,078,177
45,594	887,387	—	—	9,774	14,809	24,583	710,798	149,091	—	859,889
17,759	693,594	—	—	7,847	1,035	8,882	570,665	26,445	—	597,110
488,964	2,012,943	—	—	17,695	—	17,695	1,286,825	353,220	—	1,640,045
622	22,443	—	—	253	2,590	2,843	18,426	2,320	—	20,746
—	2,364,935	—	—	27,459	114,730	142,189	1,996,916	(134,631)	—	1,862,285
22,603	706,996	—	—	7,947	2,564	10,511	577,891	(5,955)	—	571,936
3,020	85,948	—	—	963	8,510	9,473	70,023	(5,064)	—	64,959
—	1,036,755	—	—	12,038	47,784	59,822	875,420	100,966	—	976,386
—	435,733	—	—	5,059	22,920	27,979	367,926	(19,050)	—	348,876
84,164	2,771,217	—	—	31,200	—	31,200	2,268,908	62,781	—	2,331,689
2,873	21,126	—	—	212	1,493	1,705	15,412	(155)	—	15,257
—	8,701,579	—	—	101,035	323,840	424,875	7,347,485	(478,561)	—	6,868,924
1,816	6,708,358	—	—	77,870	108,547	186,417	5,662,905	(20,011)	—	5,642,894
15,642	4,074,485	—	—	47,127	443	47,570	3,427,227	(45,372)	—	3,381,855
17,966	379,974	—	—	4,203	10,230	14,433	305,674	17,403	—	323,077
782,627	33,400,864	—	—	378,732	689,312	1,068,044	27,542,356	41,749	—	27,584,105

**Firefighter Retirement System
Division A with Social Security**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
AMERICAN FORK CITY	\$ 45,798	3.1168623%	\$ (809,462)	645,157	(1,989,929)	142,832	216,566	100,612
BRIGHAM CITY	20,541	1.3979869	(363,063)	289,368	(892,530)	64,064	97,135	45,127
CACHE COUNTY	20,473	1.3933482	(361,858)	288,408	(889,569)	63,851	96,813	44,977
CEDAR CITY	30,694	2.0889058	(542,498)	432,381	(1,333,640)	95,725	145,142	67,430
CEDAR MTN FIRE PROTECTION DIST	4,649	0.3164294	(82,178)	65,497	(202,021)	14,501	21,986	10,214
CITY OF DRAPER	91,007	6.1936704	(1,608,522)	1,282,023	(3,954,285)	283,828	430,349	199,931
CITY OF KANAB	1,283	0.0872966	(22,671)	18,069	(55,734)	4,000	6,066	2,818
CITY OF SANTA CLARA	4,584	0.3119669	(81,019)	64,574	(199,172)	14,296	21,676	10,070
CITY OF SOUTH JORDAN	107,832	7.3387121	(1,905,894)	1,519,035	(4,685,325)	336,301	509,909	236,893
CITY OF SOUTH SALT LAKE	106,576	7.2532299	(1,883,694)	1,501,341	(4,630,750)	332,383	503,970	234,134
CITY OF ST GEORGE	68,963	4.6934300	(1,218,903)	971,490	(2,996,472)	215,079	326,109	151,503
CLINTON CITY	17,222	1.1721039	(304,400)	242,613	(748,318)	53,712	81,440	37,835
EPHRAIM CITY	2,906	0.1977748	(51,363)	40,937	(126,267)	9,063	13,742	6,384
FARMINGTON CITY	23,058	1.5692631	(407,544)	324,821	(1,001,880)	71,912	109,036	50,656
HURRICANE VALLEY FIRE SSD	28,968	1.9714694	(511,999)	408,073	(1,258,664)	90,344	136,982	63,639
KAYSVILLE CITY	12,715	0.8653352	(224,731)	179,115	(552,464)	39,654	60,125	27,933
LAYTON CITY	103,812	7.0651362	(1,834,845)	1,462,407	(4,510,664)	323,764	490,901	228,062
LEHI CITY	68,348	4.6515811	(1,208,035)	962,827	(2,969,754)	213,161	323,202	150,153
MAPLETON CITY	2,378	0.1618612	(42,036)	33,504	(103,339)	7,417	11,246	5,225
MOAB VALLEY FIRE PROTECTION	4,544	0.3092371	(80,310)	64,009	(197,429)	14,171	21,486	9,982
MURRAY CITY	135,468	9.2195216	(2,394,348)	1,908,342	(5,886,109)	422,490	640,592	297,605
N TOOELE FIRE PROTECTION SD	5,309	0.3613449	(93,843)	74,795	(230,697)	16,559	25,107	11,664
NORTH DAVIS FIRE DISTRICT	42,766	2.9104953	(755,868)	602,441	(1,858,176)	133,375	202,227	93,950
NORTH FORK SSD	3,654	0.2486903	(64,586)	51,476	(158,774)	11,396	17,280	8,028
NORTH SUMMIT FIRE SERVICE DIST	2,877	0.1958032	(50,851)	40,529	(125,009)	8,973	13,605	6,321
NORTH VIEW FIRE DISTRICT	33,380	2.2717625	(589,986)	470,230	(1,450,383)	104,105	157,847	73,332
PAYSON CITY	5,876	0.3999148	(103,860)	82,778	(255,321)	18,326	27,787	12,909
PLEASANT GROVE CITY	22,594	1.5377085	(399,349)	318,289	(981,734)	70,466	106,843	49,637
PRICE CITY	3,667	0.2495349	(64,805)	51,651	(159,313)	11,435	17,338	8,055
RIVERDALE CITY	18,788	1.2786416	(332,069)	264,665	(816,336)	58,594	88,843	41,274
ROY CITY	32,048	2.1811005	(566,441)	451,464	(1,392,501)	99,950	151,547	70,406
SANTAQUIN CITY	4,347	0.2958401	(76,831)	61,236	(188,876)	13,557	20,556	9,550
SMITHFIELD CITY CORP	9,235	0.6284888	(163,221)	130,090	(401,252)	28,801	43,669	20,288
SO DAVIS METRO FIRE AGENCY	156,457	10.6480007	(2,765,334)	2,204,024	(6,798,106)	487,952	739,845	343,716
SOUTH OGDEN CITY	36,094	2.4564412	(637,948)	508,457	(1,568,290)	112,568	170,679	79,294
SPANISH FORK CITY	7,859	0.5348745	(138,909)	110,713	(341,485)	24,511	37,164	17,266
SPRINGVILLE CITY	13,127	0.8934019	(232,020)	184,925	(570,383)	40,941	62,075	28,839
STATE OF UTAH	48,564	3.3051337	(858,357)	684,127	(2,110,129)	151,460	229,648	106,689
SYRACUSE CITY CORP	45,394	3.0894007	(802,330)	639,473	(1,972,396)	141,574	214,658	99,726
TOOELE CITY	2,110	0.1435920	(37,291)	29,722	(91,675)	6,580	9,977	4,635
UINTAH FIRE SUPPRESSION SSD	3,522	0.2397265	(62,258)	49,621	(153,051)	10,986	16,657	7,738
WASATCH COUNTY FIRE DISTRICT	48,115	3.2745829	(850,423)	677,804	(2,090,624)	150,060	227,525	105,703
WASHINGTON CITY	21,752	1.4803984	(384,466)	306,427	(945,145)	67,840	102,861	47,787
	\$ 1,469,358	100.0000000%	\$ (25,970,419)	20,698,928	(63,843,971)	4,582,557	6,948,211	3,227,990
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
CITY OF WASHINGTON TERRACE	\$ —	0.0000000%	\$ —	—	—	—	—	—
HURRICANE CITY	—	0.0000000	—	—	—	—	—	—
IVINS CITY	—	0.0000000	—	—	—	—	—	—
LEEDS AREA SS DISTRICT	—	0.0000000	—	—	—	—	—	—
MORGAN COUNTY	—	0.0000000	—	—	—	—	—	—
NORTH LOGAN CITY	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$ 1,469,358	100.0000000%	\$ (25,970,419)	20,698,928	(63,843,971)	4,582,557	6,948,211	3,227,990

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Nonemployer Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
220	460,230	4,137	—	—	52,642	56,779	(25,030)	(21,108)	(209,278)	(255,416)
23,158	229,484	1,856	—	—	6,757	8,613	(11,227)	(867)	(93,866)	(105,960)
128	205,769	1,850	—	—	94,178	96,028	(11,189)	(27,521)	(93,555)	(132,265)
1,161	309,458	2,773	—	—	79,193	81,966	(16,775)	(22,325)	(140,257)	(179,357)
44	46,745	420	—	—	52,320	52,740	(2,541)	(14,230)	(21,246)	(38,017)
133,376	1,047,484	8,222	—	—	43,456	51,678	(49,739)	(12,924)	(415,866)	(478,529)
37,757	50,641	116	—	—	1,786	1,902	(701)	9,434	(5,861)	2,872
21,492	67,534	414	—	—	1,161	1,575	(2,505)	3,660	(20,947)	(19,792)
49,312	1,132,415	9,742	—	—	39,254	48,996	(58,934)	9,976	(492,749)	(541,707)
132,925	1,203,412	9,628	—	—	35,721	45,349	(58,248)	39,302	(487,009)	(505,955)
180,051	872,742	6,230	—	—	5,217	11,447	(37,691)	48,172	(315,134)	(304,653)
10,107	183,094	1,556	—	—	55,301	56,857	(9,413)	(8,893)	(78,699)	(97,005)
—	29,189	263	—	—	39,644	39,907	(1,588)	(10,827)	(13,279)	(25,694)
—	231,604	2,083	—	—	84,838	86,921	(12,602)	(24,787)	(105,366)	(142,755)
3,792	294,757	2,617	—	—	77,677	80,294	(15,832)	(22,166)	(132,372)	(170,370)
2,893	130,605	1,149	—	—	41,651	42,800	(6,949)	(14,358)	(58,102)	(79,409)
378,958	1,421,685	9,378	—	—	16,630	26,008	(56,737)	106,531	(474,380)	(424,586)
145,416	831,932	6,175	—	—	3,906	10,081	(37,355)	37,908	(312,325)	(311,772)
—	23,888	215	—	—	39,689	39,904	(1,300)	(10,470)	(10,868)	(22,638)
983	46,622	410	—	—	2,492	2,902	(2,483)	(621)	(20,763)	(23,867)
345,174	1,705,861	12,238	—	—	380	12,618	(74,038)	93,899	(619,033)	(599,172)
2,998	56,328	480	—	—	7,151	7,631	(2,902)	(1,327)	(24,262)	(28,491)
14,669	444,221	3,863	—	—	26,531	30,394	(23,373)	99	(195,422)	(218,696)
2,250	38,954	330	—	—	2,600	2,930	(1,997)	(1,510)	(16,698)	(20,205)
—	28,899	260	—	—	49,007	49,267	(1,572)	(12,886)	(13,147)	(27,605)
61	335,345	3,016	—	—	38,001	41,017	(18,244)	(13,410)	(152,535)	(184,189)
78	59,100	531	—	—	22,942	23,473	(3,212)	(5,985)	(26,852)	(36,049)
5,483	232,429	2,041	—	—	20,495	22,536	(12,349)	97	(103,247)	(115,499)
76	36,904	331	—	—	390	721	(2,004)	(9)	(16,755)	(18,768)
24,139	212,850	1,697	—	—	7,882	9,579	(10,268)	6,184	(85,853)	(89,937)
142,022	463,925	2,895	—	—	—	2,895	(17,516)	47,075	(146,447)	(116,888)
—	43,663	393	—	—	54,390	54,783	(2,376)	(15,105)	(19,864)	(37,345)
5,412	98,170	834	—	—	6,648	7,482	(5,047)	1,271	(42,199)	(45,975)
4,628	1,576,141	14,134	—	—	62,232	76,366	(85,510)	(9,759)	(714,946)	(810,215)
555	363,096	3,261	—	—	22,852	26,113	(19,727)	(6,484)	(164,935)	(191,146)
—	78,941	710	—	—	133,871	134,581	(4,295)	(35,201)	(35,913)	(75,409)
217	132,072	1,186	—	—	96,857	98,043	(7,175)	(25,669)	(59,986)	(92,830)
43,448	531,245	4,387	—	—	54,220	58,607	(26,542)	(1,629)	(221,919)	(250,090)
8,525	464,483	4,101	—	—	273,497	277,598	(24,810)	(70,109)	(207,434)	(302,353)
—	21,192	191	—	—	35,939	36,130	(1,153)	(9,450)	(9,641)	(20,244)
14,988	50,369	318	—	—	39	357	(1,925)	5,014	(16,096)	(13,007)
107,801	591,089	4,347	—	—	20,633	24,980	(26,297)	17,906	(219,868)	(228,259)
1,151	219,639	1,965	—	—	171,434	173,399	(11,888)	(44,252)	(99,399)	(155,539)
1,845,449	16,604,207	132,743	—	—	1,881,506	2,014,249	(803,059)	(17,357)	(6,714,373)	(7,534,789)
2,383	2,383	—	—	—	159	159	—	838	—	838
—	—	—	—	—	—	—	—	1,031	—	1,031
410	410	—	—	—	—	—	—	2,023	—	2,023
—	—	—	—	—	—	—	—	1,158	—	1,158
211	211	—	—	—	1,073	1,073	—	(1,821)	—	(1,821)
42,989	42,989	—	—	—	402	402	—	13,544	—	13,544
1,891,441	16,650,199	132,743	—	—	1,883,140	2,015,883	(803,059)	(584)	(6,714,373)	(7,518,016)

**Firefighter Retirement System
Division B without Social Security**

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
BLUFFDALE CITY	\$ 7,562	0.1370124%	\$ (172,457)	53,593	(358,081)	8,306	29,418	11,928
CITY OF OREM	199,635	3.6168934	(4,552,561)	1,414,766	(9,452,723)	219,255	776,584	314,891
CITY OF SARATOGA SPRINGS	39,539	0.7163530	(901,669)	280,205	(1,872,183)	43,425	153,808	62,367
CITY OF WEST JORDAN	306,422	5.5515953	(6,987,757)	2,171,534	(14,509,051)	336,536	1,191,985	483,329
LOGAN CITY	138,191	2.5036739	(3,151,358)	979,325	(6,543,332)	151,772	537,564	217,973
LONE PEAK PS DISTRICT	39,940	0.7236051	(910,797)	283,042	(1,891,136)	43,865	155,365	62,998
OGDEN CITY CORP	237,764	4.3076846	(5,422,055)	1,684,972	(11,258,100)	261,131	924,904	375,032
PARK CITY FIRE SERVICE	266,433	4.8270979	(6,075,837)	1,888,144	(12,615,583)	292,617	1,036,427	420,253
PROVO CITY CORP	264,422	4.7906658	(6,029,980)	1,873,893	(12,520,368)	290,409	1,028,605	417,081
SALT LAKE CITY CORP	1,413,930	25.6168793	(32,243,802)	10,020,171	(66,949,514)	1,552,888	5,500,207	2,230,238
SANDY CITY	274,813	4.9789224	(6,266,938)	1,947,530	(13,012,375)	301,821	1,069,026	433,471
UNIFIED FIRE AUTHORITY	1,707,056	30.9275887	(38,928,359)	12,097,481	(80,829,010)	1,874,820	6,640,472	2,692,595
WEBER FIRE DISTRICT	220,824	4.0007754	(5,035,750)	1,564,923	(10,455,995)	242,526	859,008	348,313
WEST VALLEY CITY	402,994	7.3012528	(9,190,040)	2,855,922	(19,081,767)	442,600	1,567,654	635,656
	\$ 5,519,524	100.0000000%	\$ (125,869,360)	39,115,501	(261,349,218)	6,061,971	21,471,027	8,706,125
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
NONE	\$ —	0.0000000%	\$ —	—	—	—	—	—
GRAND TOTAL	\$ 5,519,524	100.0000000%	\$ (125,869,360)	39,115,501	(261,349,218)	6,061,971	21,471,027	8,706,125

Columns may not add to total due to rounding.

Judges Retirement System

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
STATE OF UTAH	\$ 9,378,006	100.0000000%	\$ 35,268,363	68,697,896	6,908,639	7,013,069	4,293,863	2,437,427

Utah Governors and Legislators Retirement Plan

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
STATE OF UTAH	\$ 422,455	100.0000000%	\$ 1,043,978	2,265,342	(724)	—	123,331	—

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
—	49,652	221	—	—	132,769	132,990	(7,636)	(51,965)	(21,955)	(81,556)
46,615	1,357,345	5,842	—	—	323	6,165	(201,586)	28,555	(579,566)	(752,597)
137	259,737	1,157	—	—	83,717	84,874	(39,926)	(36,715)	(114,787)	(191,428)
113,476	2,125,326	8,966	—	—	377,856	386,822	(309,415)	(82,660)	(889,580)	(1,281,655)
105,074	1,012,383	4,044	—	—	23,215	27,259	(139,541)	26,626	(401,185)	(514,100)
24,107	286,335	1,169	—	—	128,193	129,362	(40,330)	(37,144)	(115,949)	(193,423)
152,815	1,713,882	6,957	—	—	165,902	172,859	(240,087)	26,143	(690,257)	(904,201)
9,200	1,758,497	7,796	—	—	104,519	112,315	(269,036)	(38,744)	(773,487)	(1,081,267)
31,534	1,767,629	7,737	—	—	112,204	119,941	(267,005)	(24,926)	(767,649)	(1,059,580)
1,120,410	10,403,743	41,374	—	—	100,387	141,761	(1,427,743)	392,953	(4,104,812)	(5,139,602)
80,339	1,884,657	8,042	—	—	90,711	98,753	(277,498)	(20,356)	(797,815)	(1,095,669)
500,258	11,708,145	49,952	—	—	113,983	163,935	(1,723,732)	131,632	(4,955,795)	(6,547,895)
471	1,450,318	6,462	—	—	472,989	479,451	(222,981)	(194,927)	(641,079)	(1,058,987)
139,752	2,785,662	11,792	—	—	76,199	87,991	(406,931)	13,339	(1,169,942)	(1,563,534)
2,324,188	38,563,311	161,511	—	—	1,982,967	2,144,478	(5,573,447)	131,812	(16,023,858)	(21,465,493)
—	—	—	—	—	—	—	—	—	—	—
2,324,188	38,563,311	161,511	—	—	1,982,967	2,144,478	(5,573,447)	131,812	(16,023,858)	(21,465,493)

Deferred Outflows of Resources		Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
—	13,744,359	—	—	—	—	—	9,691,343	—	(1,335,491)	8,355,852

Deferred Outflows of Resources		Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
—	123,331	—	—	—	—	—	46,416	—	—	46,416

Tier 2 Public Employees Contributory Retirement System

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
4 CORNERS COMM BEHAVIOR HEALTH	\$ 287,279	0.1358814%	\$ 147,960	646,506	(236,106)	49,976	59,653	48,035
ACTIVE RE ENTRY INC	6,755	0.0031949	3,479	15,201	(5,551)	1,175	1,403	1,129
ALPINE CITY	34,622	0.0163762	17,832	77,916	(28,455)	6,023	7,189	5,789
ALPINE SCHOOL DISTRICT	12,534,346	5.9286751	6,455,697	28,207,857	(10,301,585)	2,180,496	2,602,729	2,095,826
ALPINE UNISERV	7,187	0.0033995	3,702	16,174	(5,907)	1,250	1,492	1,202
AMERICAN FORK CITY	169,283	0.0800700	87,188	380,963	(139,129)	29,449	35,151	28,305
AMERICAN LEADERSHIP ACADEMY	295,661	0.1398459	152,277	665,368	(242,994)	51,434	61,393	49,436
AMES CHARTER SCHOOL	50,021	0.0236598	25,763	112,570	(41,111)	8,702	10,387	8,364
ASH CREEK SS DISTRICT	43,030	0.0203529	22,162	96,836	(35,365)	7,486	8,935	7,195
ASHLEY VALLEY IMPROV DIST	22,140	0.0104720	11,403	49,824	(18,196)	3,851	4,597	3,702
BALLARD CITY	2,299	0.0010875	1,184	5,174	(1,890)	400	477	384
BEAR LAKE SSD	4,453	0.0021062	2,293	10,021	(3,660)	775	925	745
BEAR RIVER ASSN OF GOVTS	66,319	0.0313685	34,157	149,247	(54,505)	11,537	13,771	11,089
BEAR RIVER HEALTH DEPT	276,761	0.1309064	142,543	622,835	(227,461)	48,146	57,469	46,276
BEAR RIVER MENTAL HEALTH	342,434	0.1619694	176,367	770,629	(281,436)	59,570	71,106	57,257
BEAR RIVER WATER DISTRICT	26,401	0.0124875	13,598	59,414	(21,698)	4,593	5,482	4,414
BEAVER CITY	64,280	0.0304042	33,107	144,659	(52,830)	11,182	13,348	10,748
BEAVER COUNTY	124,387	0.0588343	64,064	279,926	(102,230)	21,639	25,829	20,798
BEAVER HOUSING AUTHORITY	9,215	0.0043588	4,746	20,739	(7,574)	1,603	1,914	1,541
BEAVER SCHOOL DISTRICT	240,649	0.1138256	123,944	541,567	(197,782)	41,864	49,970	40,238
BEAVER VALLEY HOSPITAL	164,713	0.0779081	84,834	370,677	(135,372)	28,654	34,202	27,541
BENCHLAND WATER COMPANY	11,052	0.0052275	5,692	24,872	(9,083)	1,923	2,295	1,848
BIG COTTONWOOD CANYON IMP DIST	6,098	0.0028845	3,141	13,724	(5,012)	1,061	1,266	1,020
BLANDING CITY	30,147	0.0142596	15,527	67,845	(24,777)	5,245	6,260	5,041
BLUFFDALE CITY	130,508	0.0617294	67,217	293,700	(107,260)	22,703	27,100	21,822
BONA VISTA WATER IMPROVE	16,243	0.0076829	8,366	36,554	(13,350)	2,826	3,373	2,716
BOUNTIFUL IRRIGATION DISTRICT	15,900	0.0075204	8,189	35,781	(13,067)	2,766	3,302	2,659
BOX ELDER CO MOSQ DIST	6,652	0.0031462	3,426	14,969	(5,467)	1,157	1,381	1,112
BOX ELDER COUNTY	252,427	0.1193967	130,010	568,074	(207,462)	43,913	52,416	42,208
BOX ELDER SCHOOL DISTRICT	2,022,678	0.9567151	1,041,761	4,551,925	(1,662,375)	351,868	420,005	338,205
BRIDGERLAND TECHNICAL COLLEGE	59,055	0.0279327	30,416	132,900	(48,535)	10,273	12,263	9,874
BRIGHAM CITY	232,328	0.1098900	119,659	522,842	(190,943)	40,416	48,242	38,847
BRYCE CANYON CITY	4,177	0.0019755	2,151	9,399	(3,433)	727	867	698
CACHE COUNTY	486,023	0.2298861	250,322	1,093,768	(399,447)	84,549	100,922	81,266
CACHE COUNTY SCHOOL DISTRICT	2,878,569	1.3615469	1,482,580	6,478,061	(2,365,805)	500,761	597,728	481,316
CANYONS SCHOOL DISTRICT	7,507,911	3.5511996	3,866,879	16,896,141	(6,170,516)	1,306,089	1,559,001	1,255,373
CARBON COUNTY	218,667	0.1034282	112,622	492,098	(179,715)	38,040	45,406	36,563
CARBON SCHOOL DISTRICT	598,915	0.2832833	308,465	1,347,825	(492,229)	104,188	124,363	100,143
CASTLE DALE CITY	6,965	0.0032945	3,587	15,675	(5,724)	1,212	1,446	1,165
CASTLE VALLEY SSD	25,243	0.0119396	13,001	56,807	(20,746)	4,391	5,242	4,221
CEDAR CITY	267,995	0.1267600	138,028	603,107	(220,256)	46,621	55,649	44,811
CEDAR CITY HOUSING AUTH	9,519	0.0045026	4,903	21,423	(7,824)	1,656	1,977	1,592
CEDAR MTN FIRE PROTECTION DIST	7,491	0.0035431	3,858	16,858	(6,156)	1,303	1,555	1,253
CENTERVILLE CITY	79,825	0.0377565	41,113	179,640	(65,605)	13,886	16,575	13,347
CENTRAL DAVIS SEWER DIST	41,187	0.0194812	21,213	92,689	(33,850)	7,165	8,552	6,887
CENTRAL IRON CO WATER CONSERV	29,307	0.0138623	15,095	65,955	(24,087)	5,098	6,086	4,900
CENTRAL UT PUBLIC HEALTH	133,259	0.0630309	68,634	299,893	(109,522)	23,182	27,671	22,282
CENTRAL UTAH 911	121,692	0.0575595	62,676	273,861	(100,015)	21,170	25,269	20,348
CENTRAL UTAH COUNSELING CENTER	229,039	0.1083344	117,965	515,441	(188,240)	39,844	47,560	38,297
CENTRAL UTAH WATER DIST	294,926	0.1394984	151,899	663,715	(242,391)	51,306	61,241	49,314
CENTRAL VALLEY TOWN	3,678	0.0017396	1,894	8,277	(3,023)	640	764	615
CENTRAL WASATCH COMMISSION	9,100	0.0043042	4,687	20,479	(7,479)	1,583	1,890	1,522
CENTRAL WEBER SEWER DIST	134,312	0.0635289	69,176	302,262	(110,387)	23,365	27,890	22,458
CITY OF AURORA	5,232	0.0024748	2,695	11,775	(4,300)	910	1,086	875
CITY OF BOUNTIFUL	447,967	0.2118860	230,721	1,008,126	(368,170)	77,929	93,019	74,903

Utah Retirement Systems

Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions		
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
26,575	184,239	5,870	—	376	5,830	12,076	280,670	2,934	—	283,604
2,007	5,714	138	—	9	1,004	1,151	6,599	133	—	6,732
3,386	22,387	707	—	45	950	1,702	33,826	396	—	34,222
1,240,551	8,119,602	256,134	—	16,422	308,430	580,986	12,245,971	138,078	—	12,384,049
147	4,091	147	—	9	77	233	7,022	11	—	7,033
14,604	107,509	3,459	—	222	3,877	7,558	165,389	1,695	—	167,084
32,606	194,869	6,042	—	387	8,678	15,107	288,859	3,608	—	292,467
6,701	34,154	1,022	—	66	1,338	2,426	48,870	648	—	49,518
4,049	27,665	879	—	56	663	1,598	42,040	408	—	42,448
2,409	14,559	452	—	29	1,026	1,507	21,630	257	—	21,887
141	1,402	47	—	3	66	116	2,246	20	—	2,266
661	3,106	91	—	6	568	665	4,350	18	—	4,368
9,511	45,908	1,355	—	87	2,323	3,765	64,793	1,006	—	65,799
29,217	181,108	5,656	—	363	7,538	13,557	270,394	3,176	—	273,570
36,032	223,965	6,998	—	449	7,880	15,327	334,556	3,827	—	338,383
2,881	17,370	539	—	35	693	1,267	25,794	335	—	26,129
5,812	41,090	1,314	—	84	1,475	2,873	62,801	641	—	63,442
13,603	81,869	2,542	—	163	3,542	6,247	121,525	1,542	—	123,067
592	5,650	188	—	12	42	242	9,003	58	—	9,061
25,594	157,666	4,918	—	315	6,013	11,246	235,112	2,761	—	237,873
15,268	105,665	3,366	—	216	4,187	7,769	160,923	1,765	—	162,688
1,807	7,873	226	—	14	456	696	10,798	195	—	10,993
1,074	4,421	125	—	8	189	322	5,958	111	—	6,069
3,141	19,687	616	—	39	874	1,529	29,454	367	—	29,821
11,940	83,565	2,667	—	171	3,616	6,454	127,505	1,438	—	128,943
2,326	11,241	332	—	21	499	852	15,869	245	—	16,114
1,898	10,625	325	—	21	439	785	15,534	209	—	15,743
552	4,202	136	—	9	185	330	6,499	68	—	6,567
24,800	163,337	5,158	—	331	5,502	10,991	246,620	2,688	—	249,308
205,834	1,315,912	41,333	—	2,650	47,757	91,740	1,976,142	22,436	—	1,998,578
5,398	37,808	1,207	—	77	1,862	3,146	57,696	689	—	58,385
24,166	151,671	4,748	—	304	5,786	10,838	226,983	2,718	—	229,701
42	2,334	85	—	5	—	90	4,080	4	—	4,084
40,714	307,451	9,932	—	637	8,173	18,742	474,841	4,444	—	479,285
314,941	1,894,746	58,822	—	3,771	75,046	137,639	2,812,342	34,221	—	2,846,563
785,295	4,905,758	153,421	—	9,837	203,155	366,413	7,335,178	87,431	—	7,422,609
18,740	138,749	4,468	—	286	5,502	10,256	213,636	2,328	—	215,964
62,529	391,223	12,239	—	785	16,323	29,347	585,136	7,061	—	592,197
881	4,704	142	—	9	480	631	6,805	66	—	6,871
2,851	16,705	516	—	33	547	1,096	24,662	308	—	24,970
25,957	173,038	5,476	—	351	6,086	11,913	261,829	2,872	—	264,701
786	6,011	195	—	12	249	456	9,300	95	—	9,395
1,765	5,876	153	—	10	375	538	7,318	163	—	7,481
9,239	53,047	1,631	—	105	1,962	3,698	77,988	964	—	78,952
3,391	25,995	842	—	54	932	1,828	40,239	342	—	40,581
3,689	19,773	599	—	38	899	1,536	28,633	386	—	29,019
13,311	86,446	2,723	—	175	2,911	5,809	130,193	1,407	—	131,600
8,634	75,421	2,487	—	159	2,186	4,832	118,892	1,037	—	119,929
24,601	150,302	4,680	—	300	4,848	9,828	223,770	2,531	—	226,301
30,186	192,047	6,027	—	386	8,199	14,612	288,141	3,538	—	291,679
675	2,694	75	—	5	256	336	3,593	50	—	3,643
1,538	6,533	186	—	12	846	1,044	8,891	108	—	8,999
12,529	86,242	2,745	—	176	3,316	6,237	131,222	1,440	—	132,662
919	3,790	107	—	7	192	306	5,112	74	—	5,186
40,985	286,836	9,154	—	587	10,670	20,411	437,661	4,694	—	442,355

Tier 2 Public Employees Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts (Continued)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
CITY OF CEDAR HILLS	\$ 42,474	0.0200899%	\$ 21,876	95,585	(34,908)	7,389	8,820	7,102
CITY OF DRAPER	402,537	0.1903978	207,323	905,888	(330,833)	70,026	83,586	67,307
CITY OF DUCHESNE	20,331	0.0096164	10,471	45,754	(16,709)	3,537	4,222	3,399
CITY OF ENTERPRISE	4,655	0.0022019	2,398	10,476	(3,826)	810	967	778
CITY OF GREEN RIVER	29,318	0.0138671	15,100	65,978	(24,095)	5,100	6,088	4,902
CITY OF HARRISVILLE	15,835	0.0074899	8,156	35,636	(13,014)	2,755	3,288	2,648
CITY OF HELPER	19,843	0.0093858	10,220	44,656	(16,309)	3,452	4,120	3,318
CITY OF HOLLADAY	28,398	0.0134319	14,626	63,907	(23,339)	4,940	5,897	4,748
CITY OF KANAB	78,266	0.0370194	40,310	176,133	(64,324)	13,615	16,252	13,087
CITY OF MILFORD	15,118	0.0071509	7,787	34,023	(12,425)	2,630	3,139	2,528
CITY OF MOAB	235,557	0.1114174	121,322	530,109	(193,597)	40,978	48,913	39,387
CITY OF MONTICELLO	29,499	0.0139526	15,193	66,385	(24,244)	5,132	6,125	4,932
CITY OF NAPLES	4,379	0.0020714	2,256	9,855	(3,599)	762	909	732
CITY OF NORTH SALT LAKE	129,309	0.0611624	66,599	291,003	(106,275)	22,495	26,851	21,621
CITY OF OREM	648,058	0.3065277	333,776	1,458,419	(532,618)	112,737	134,568	108,360
CITY OF RIVERTON	260,581	0.1232535	134,210	586,424	(214,164)	45,331	54,109	43,571
CITY OF SANTA CLARA	105,944	0.0501107	54,565	238,420	(87,072)	18,430	21,999	17,714
CITY OF SARATOGA SPRINGS	348,951	0.1650519	179,724	785,295	(286,792)	60,704	72,459	58,347
CITY OF SOUTH JORDAN	555,833	0.2629057	286,276	1,250,871	(456,821)	96,694	115,417	92,939
CITY OF SOUTH SALT LAKE	408,802	0.1933612	210,550	919,987	(335,982)	71,116	84,887	68,354
CITY OF ST GEORGE	1,413,830	0.6687335	728,180	3,181,746	(1,161,982)	245,952	293,579	236,402
CITY OF TAYLORSVILLE	84,366	0.0399045	43,452	189,860	(69,338)	14,676	17,518	14,107
CITY OF UINTAH	4,810	0.0022752	2,477	10,825	(3,953)	837	999	804
CITY OF WASHINGTON TERRACE	32,472	0.0153591	16,724	73,077	(26,688)	5,649	6,743	5,430
CITY OF WENDOVER	21,686	0.0102573	11,169	48,803	(17,823)	3,773	4,503	3,626
CITY OF WEST HAVEN	82,112	0.0388387	42,291	184,789	(67,486)	14,284	17,050	13,730
CITY OF WEST JORDAN	642,556	0.3039256	330,943	1,446,038	(528,097)	111,780	133,425	107,440
CITY OF WOODLAND HILLS	8,921	0.0042196	4,595	20,076	(7,332)	1,552	1,852	1,492
CLEARFIELD CITY	227,324	0.1075229	117,081	511,580	(186,830)	39,546	47,203	38,010
CLEVELAND TOWN	3,222	0.0015238	1,659	7,250	(2,648)	560	669	539
CLINTON CITY	66,950	0.0316672	34,482	150,668	(55,024)	11,647	13,902	11,195
COALVILLE CITY	18,419	0.0087122	9,487	41,452	(15,138)	3,204	3,825	3,080
COLOR COUNTRY UNISERV	2,387	0.0011289	1,229	5,371	(1,962)	415	496	399
COTTONWOOD HEIGHTS CITY	178,498	0.0844284	91,934	401,699	(146,702)	31,052	37,065	29,846
COTTONWOOD HEIGHTS P&R SRV	55,782	0.0263845	28,730	125,534	(45,845)	9,704	11,583	9,327
COTTONWOOD IMP DISTRICT	61,844	0.0292518	31,852	139,176	(50,828)	10,758	12,842	10,341
COUNCIL ON AGING GOLDEN AGE SS	6,736	0.0031863	3,470	15,160	(5,536)	1,172	1,399	1,126
DAGGETT COUNTY	39,740	0.0187966	20,467	89,432	(32,661)	6,913	8,252	6,645
DAGGETT SCHOOL DISTRICT	73,644	0.0348333	37,930	165,732	(60,526)	12,811	15,292	12,314
DAVIS & WEBER COUNTY CANAL CO	19,904	0.0094147	10,252	44,794	(16,359)	3,463	4,133	3,328
DAVIS BEHAVIORAL HEALTH INC	711,532	0.3365504	366,468	1,601,263	(584,785)	123,779	147,748	118,973
DAVIS CO HOUSING AUTHORITY	24,074	0.0113871	12,399	54,178	(19,786)	4,188	4,999	4,025
DAVIS CO MOSQUITO ABATE	4,259	0.0020145	2,194	9,585	(3,500)	741	884	712
DAVIS COUNTY	1,376,649	0.6511471	709,030	3,098,072	(1,131,424)	239,484	285,858	230,185
DAVIS SCHOOL DISTRICT	11,650,412	5.5105793	6,000,435	26,218,613	(9,575,107)	2,026,726	2,419,182	1,948,027
DAVIS TECHNICAL COLLEGE	169,495	0.0801702	87,297	381,439	(139,303)	29,486	35,195	28,341
DDI VANTAGE	234,937	0.1111237	121,002	528,712	(193,087)	40,870	48,784	39,283
DELTA CITY	25,416	0.0120218	13,090	57,198	(20,889)	4,421	5,278	4,250
DIXIE TECHNICAL COLLEGE	21,035	0.0099493	10,834	47,337	(17,288)	3,659	4,368	3,517
DUCHESNE CO WATER CONSERV DIST	4,361	0.0020626	2,246	9,814	(3,584)	759	905	729
DUCHESNE COUNTY	198,533	0.0939048	102,252	446,787	(163,168)	34,537	41,225	33,196
DUCHESNE SCHOOL DISTRICT	1,070,524	0.5063518	551,363	2,409,155	(879,830)	186,230	222,292	178,999
EAGLE MOUNTAIN CITY	289,069	0.1367281	148,882	650,534	(237,577)	50,287	60,025	48,334
EAST CARBON CITY	10,295	0.0048695	5,302	23,168	(8,461)	1,791	2,138	1,721
EAST HOLLYWOOD HIGH SCHOOL	68,121	0.0322207	35,085	153,302	(55,986)	11,850	14,145	11,390
EDUCATORS MUTUAL INSURANCE	21,594	0.0102140	11,122	48,597	(17,748)	3,757	4,484	3,611
ELK RIDGE CITY	33,802	0.0159882	17,409	76,070	(27,781)	5,880	7,019	5,652
ELWOOD TOWN	11,104	0.0052520	5,719	24,988	(9,126)	1,932	2,306	1,857
EMERY CO CARE & REHAB CTR	78,300	0.0370353	40,328	176,209	(64,352)	13,621	16,259	13,092
EMERY COUNTY	119,580	0.0565607	61,589	269,108	(98,279)	20,802	24,831	19,995

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
5,002	28,313	868	—	56	1,343	2,267	41,497	539	—	42,036
39,924	260,843	8,226	—	527	9,735	18,488	393,276	4,479	—	397,755
1,546	12,704	415	—	27	329	771	19,863	179	—	20,042
821	3,376	95	—	6	399	500	4,548	60	—	4,608
3,189	19,279	599	—	38	750	1,387	28,643	331	—	28,974
2,318	11,009	324	—	21	871	1,216	15,471	232	—	15,703
1,385	12,275	405	—	26	525	956	19,387	141	—	19,528
1,765	17,350	580	—	37	1,052	1,669	27,744	194	—	27,938
8,704	51,658	1,599	—	103	2,001	3,703	76,465	941	—	77,406
1,370	9,667	309	—	20	457	786	14,771	167	—	14,938
21,632	150,910	4,814	—	309	5,206	10,329	230,138	2,457	—	232,595
3,393	19,582	603	—	39	1,032	1,674	28,820	348	—	29,168
1,431	3,834	89	—	6	1,223	1,318	4,279	107	—	4,386
11,065	82,032	2,642	—	169	2,580	5,391	126,334	1,236	—	127,570
52,353	408,018	13,243	—	849	12,872	26,964	633,148	6,048	—	639,196
27,953	170,964	5,325	—	341	7,283	12,949	254,586	3,201	—	257,787
8,727	66,870	2,165	—	139	1,801	4,105	103,506	949	—	104,455
32,507	224,017	7,131	—	457	7,187	14,775	340,923	3,616	—	344,539
49,730	354,780	11,358	—	728	12,579	24,665	543,045	5,700	—	548,745
35,543	259,900	8,354	—	536	8,580	17,470	399,397	3,947	—	403,344
131,660	907,593	28,891	—	1,852	33,794	64,537	1,381,302	15,034	—	1,396,336
7,259	53,560	1,724	—	111	2,115	3,950	82,425	858	—	83,283
438	3,078	98	—	6	397	501	4,700	8	—	4,708
4,467	22,289	664	—	43	1,105	1,812	31,725	470	—	32,195
2,321	14,223	443	—	28	1,987	2,458	21,187	122	—	21,309
8,306	53,370	1,678	—	108	1,593	3,379	80,223	845	—	81,068
52,854	405,499	13,130	—	842	14,838	28,810	627,773	6,424	—	634,197
906	5,802	182	—	12	247	441	8,716	103	—	8,819
17,129	141,888	4,645	—	298	4,494	9,437	222,094	2,044	—	224,138
319	2,087	66	—	4	281	351	3,147	23	—	3,170
4,745	41,489	1,368	—	88	1,188	2,644	65,410	561	—	65,971
1,565	11,674	376	—	24	464	864	17,995	188	—	18,183
196	1,506	49	—	3	67	119	2,332	26	—	2,358
18,797	116,760	3,648	—	234	4,317	8,199	174,391	2,015	—	176,406
3,999	34,613	1,140	—	73	934	2,147	54,498	476	—	54,974
5,133	39,074	1,264	—	81	1,150	2,495	60,421	565	—	60,986
1,514	5,211	138	—	9	1,432	1,579	6,581	62	—	6,643
2,975	24,785	812	—	52	692	1,556	38,825	342	—	39,167
6,978	47,395	1,505	—	96	1,724	3,325	71,950	759	—	72,709
1,815	12,739	407	—	26	1,181	1,614	19,447	113	—	19,560
75,081	465,581	14,540	—	932	18,150	33,622	695,161	8,188	—	703,349
1,767	14,979	492	—	32	476	1,000	23,521	207	—	23,728
469	2,806	87	—	6	256	349	4,161	35	—	4,196
148,231	903,758	28,131	—	1,804	33,604	63,539	1,344,976	15,914	—	1,360,890
1,171,001	7,564,936	238,072	—	15,264	279,740	533,076	11,382,374	129,256	—	11,511,630
19,554	112,576	3,464	—	222	4,649	8,335	165,596	2,151	—	167,747
19,179	148,116	4,801	—	308	6,359	11,468	229,531	2,361	—	231,892
2,006	15,955	519	—	33	661	1,213	24,832	263	—	25,095
1,817	13,361	430	—	28	263	721	20,551	180	—	20,731
674	3,067	89	—	6	145	240	4,260	71	—	4,331
15,487	124,445	4,057	—	260	6,504	10,821	193,965	1,774	—	195,739
108,759	696,280	21,876	—	1,403	28,200	51,479	1,045,895	12,337	—	1,058,232
28,778	187,424	5,907	—	379	6,342	12,628	282,419	3,131	—	285,550
1,418	7,068	210	—	13	428	651	10,058	151	—	10,209
5,094	42,479	1,392	—	89	2,663	4,144	66,553	552	—	67,105
1,483	13,335	441	—	28	2,103	2,572	21,098	112	—	21,210
2,572	21,123	691	—	44	771	1,506	33,024	315	—	33,339
1,839	7,934	227	—	15	306	548	10,848	165	—	11,013
9,170	52,142	1,600	—	103	1,990	3,693	76,498	913	—	77,411
9,529	75,157	2,444	—	157	2,276	4,877	116,829	1,135	—	117,964

Tier 2 Public Employees Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts (Continued)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
EMERY COUNTY RECREATION SSD	\$ 4,494	0.0021258%	\$ 2,315	10,114	(3,694)	782	933	751
EMERY SCHOOL DISTRICT	392,214	0.1855152	202,006	882,657	(322,349)	68,230	81,442	65,581
EMERY TOWN	3,649	0.0017262	1,880	8,213	(2,999)	635	758	610
EMERY WATER CONSERV DIST	18,489	0.0087451	9,522	41,608	(15,195)	3,216	3,839	3,091
ENOCH CITY	45,720	0.0216252	23,548	102,890	(37,576)	7,953	9,494	7,645
EPHRAIM CITY	79,377	0.0375451	40,883	178,635	(65,238)	13,809	16,483	13,272
ESCALANTE CITY	6,067	0.0028695	3,125	13,653	(4,986)	1,055	1,260	1,014
ESPERANZA ELEMENTARY SCHOOL	117,223	0.0554457	60,374	263,803	(96,342)	20,392	24,341	19,600
EUREKA CITY CORPORATION	3,351	0.0015850	1,726	7,541	(2,754)	583	696	560
FAIRVIEW CITY	13,655	0.0064589	7,033	30,731	(11,223)	2,376	2,836	2,283
FARMINGTON CITY	157,225	0.0743667	80,977	353,827	(129,219)	27,351	32,647	26,289
FARR WEST CITY	15,696	0.0074242	8,084	35,323	(12,900)	2,731	3,259	2,625
FAST FORWARD CHARTER HS	50,005	0.0236521	25,755	112,534	(41,098)	8,699	10,383	8,361
FERRON CITY	10,408	0.0049227	5,360	23,422	(8,554)	1,811	2,161	1,740
FILLMORE CITY	20,548	0.0097192	10,583	46,243	(16,888)	3,575	4,267	3,436
FIVE-COUNTY ASSN OF GOVTS	148,240	0.0701166	76,350	333,606	(121,834)	25,788	30,782	24,787
FOX HOLLOW GOLF COURSE	17,275	0.0081709	8,897	38,876	(14,198)	3,005	3,587	2,888
FRANCIS CITY	9,618	0.0045491	4,953	21,644	(7,904)	1,673	1,997	1,608
FRUIT HEIGHTS CITY	13,642	0.0064526	7,026	30,701	(11,212)	2,373	2,833	2,281
GARFIELD COUNTY	87,192	0.0412414	44,908	196,221	(71,660)	15,168	18,105	14,579
GARFIELD SCHOOL DISTRICT	236,898	0.1120515	122,012	533,126	(194,699)	41,211	49,191	39,611
GARLAND CITY	6,660	0.0031504	3,430	14,989	(5,474)	1,159	1,383	1,114
GRAND COUNTY	314,201	0.1486151	161,826	707,091	(258,232)	54,659	65,243	52,536
GRAND COUNTY EMS SSD	67,177	0.0317742	34,599	151,177	(55,210)	11,686	13,949	11,232
GRAND SCHOOL DISTRICT	508,481	0.2405089	261,889	1,144,310	(417,905)	88,456	105,585	85,022
GRAND WATER/SEWER SERVICE	26,711	0.0126341	13,757	60,111	(21,953)	4,647	5,546	4,466
GRANGER-HUNTER IMP DIST	188,785	0.0892944	97,232	424,851	(155,157)	32,841	39,201	31,566
GRANITE SCHOOL DISTRICT	11,013,344	5.2092495	5,672,319	24,784,925	(9,051,520)	1,915,900	2,286,896	1,841,505
GRANITE UNISERV	4,277	0.0020229	2,203	9,625	(3,515)	744	888	715
GRANTSVILLE CITY	132,027	0.0624481	67,999	297,120	(108,509)	22,968	27,415	22,076
GREATER SALT LAKE MUNICIPAL SD	129,032	0.0610315	66,457	290,380	(106,047)	22,447	26,793	21,575
GUNNISON CITY	12,207	0.0057740	6,287	27,472	(10,033)	2,124	2,535	2,041
GUNNISON VALLEY HOSPITAL	326,902	0.1546230	168,368	735,676	(268,671)	56,869	67,881	54,660
HEBER CITY	219,926	0.1040239	113,271	494,932	(180,751)	38,259	45,667	36,773
HEBER LIGHT & POWER	132,676	0.0627548	68,333	298,579	(109,042)	23,080	27,550	22,184
HEBER VALLEY HISTORIC RAILROAD	32,647	0.0154420	16,815	73,471	(26,832)	5,679	6,779	5,459
HERRIMAN CITY	345,380	0.1633626	177,885	777,258	(283,857)	60,083	71,717	57,750
HIGH DESERT UNISERV	2,427	0.0011478	1,250	5,461	(1,994)	422	504	406
HIGH SCHOOL ACTIVITIES ASSN	9,015	0.0042640	4,643	20,288	(7,409)	1,568	1,872	1,507
HIGH VALLEY TRANSIT DISTRICT	1,520	0.0007189	783	3,420	(1,249)	264	316	254
HIGHLAND CITY	63,372	0.0299748	32,639	142,616	(52,084)	11,024	13,159	10,596
HINCKLEY TOWN	5,133	0.0024281	2,644	11,553	(4,219)	893	1,066	858
HONEYVILLE CITY	2,256	0.0010671	1,162	5,077	(1,854)	392	468	377
HOOPER CITY	31,286	0.0147980	16,113	70,407	(25,713)	5,443	6,496	5,231
HOOPER WATER IMPROV DIST	14,671	0.0069393	7,556	33,016	(12,058)	2,552	3,046	2,453
HOUSING AUTH OF CARBON CO	16,469	0.0077899	8,482	37,063	(13,536)	2,865	3,420	2,754
HOUSING AUTHORITY OF SLC	242,198	0.1145585	124,742	545,054	(199,055)	42,133	50,292	40,497
HOUSING AUTHORITY OGDEN CITY	37,200	0.0175953	19,159	83,716	(30,573)	6,471	7,724	6,220
HOUSING CONNECT	363,992	0.1721660	187,470	819,143	(299,153)	63,321	75,582	60,862
HUNTINGTON CITY	1,145	0.0005414	590	2,576	(941)	199	238	191
HURRICANE CITY	247,417	0.1170268	127,430	556,798	(203,344)	43,041	51,376	41,370
HURRICANE VALLEY FIRE SSD	14,341	0.0067830	7,386	32,273	(11,786)	2,495	2,978	2,398
HYDE PARK CITY	33,650	0.0159163	17,331	75,728	(27,656)	5,854	6,987	5,627
HYRUM CITY	46,841	0.0221557	24,125	105,414	(38,497)	8,149	9,727	7,832
INTECH COLLEGIATE HIGH SCHOOL	53,531	0.0253198	27,571	120,468	(43,995)	9,312	11,116	8,951
IRON COUNTY	318,626	0.1507085	164,106	717,051	(261,869)	55,429	66,162	53,276
IRON SCHOOL DISTRICT	1,474,078	0.6972305	759,210	3,317,331	(1,211,498)	256,433	306,089	246,476
ITINERIS HIGH SCHOOL	66,998	0.0316898	34,507	150,776	(55,064)	11,655	13,912	11,203
IVINS CITY	92,659	0.0438271	47,723	208,524	(76,153)	16,119	19,240	15,493
JORDAN RIVER COMMISSION	1,361	0.0006439	701	3,064	(1,119)	237	283	228

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
295	2,761	92	—	6	192	290	4,391	38	—	4,429
41,808	257,061	8,015	—	514	10,023	18,552	383,191	4,560	—	387,751
728	2,731	75	—	5	127	207	3,566	66	—	3,632
1,344	11,490	378	—	24	660	1,062	18,063	148	—	18,211
4,823	29,915	934	—	60	1,144	2,138	44,668	514	—	45,182
8,218	51,782	1,622	—	104	1,815	3,541	77,551	881	—	78,432
608	3,937	124	—	8	84	216	5,927	52	—	5,979
4,192	68,525	2,395	—	154	—	2,549	114,526	414	—	114,940
514	2,353	68	—	4	82	154	3,274	51	—	3,325
1,753	9,248	279	—	18	347	644	13,341	174	—	13,515
9,829	96,116	3,213	—	206	2,710	6,129	153,608	1,212	—	154,820
2,356	10,971	321	—	21	455	797	15,335	242	—	15,577
5,253	32,696	1,022	—	66	1,800	2,888	48,855	594	—	49,449
1,118	6,830	213	—	14	346	573	10,168	125	—	10,293
1,385	12,663	420	—	27	542	989	20,075	154	—	20,229
13,064	94,421	3,029	—	194	3,095	6,318	144,829	1,462	—	146,291
2,551	12,031	353	—	23	496	872	16,877	226	—	17,103
1,238	6,516	197	—	13	444	654	9,396	92	—	9,488
1,529	9,016	279	—	18	1,012	1,309	13,328	122	—	13,450
8,645	56,497	1,782	—	114	1,977	3,873	85,186	939	—	86,125
27,995	158,008	4,841	—	310	5,782	10,933	231,448	2,852	—	234,300
1,255	4,911	136	—	9	1,046	1,191	6,507	79	—	6,586
27,829	200,267	6,421	—	412	6,659	13,492	306,972	3,196	—	310,168
8,936	45,803	1,373	—	88	1,428	2,889	65,631	910	—	66,541
50,051	329,114	10,391	—	666	13,571	24,628	496,783	5,706	—	502,489
2,448	17,107	546	—	35	1,311	1,892	26,096	214	—	26,310
21,107	124,715	3,858	—	247	5,706	9,811	184,442	2,357	—	186,799
1,217,232	7,261,533	225,053	—	14,430	308,450	547,933	10,759,962	133,595	—	10,893,557
747	3,094	87	—	6	121	214	4,178	71	—	4,249
13,126	85,585	2,698	—	173	2,665	5,536	128,990	1,373	—	130,363
18,638	89,453	2,637	—	169	2,815	5,621	126,064	1,830	—	127,894
1,394	8,094	249	—	16	315	580	11,926	144	—	12,070
35,332	214,742	6,680	—	428	7,667	14,775	319,381	3,552	—	322,933
22,734	143,433	4,494	—	288	7,122	11,904	214,867	2,286	—	217,153
11,191	84,005	2,711	—	174	2,736	5,621	129,623	1,338	—	130,961
1,998	19,915	667	—	43	623	1,333	31,896	272	—	32,168
36,030	225,580	7,058	—	453	8,437	15,948	337,434	4,031	—	341,465
194	1,526	50	—	3	71	124	2,371	26	—	2,397
996	5,943	184	—	12	267	463	8,808	109	—	8,917
16	850	31	—	2	—	33	1,485	1	—	1,486
9,358	44,137	1,295	—	83	2,174	3,552	61,914	881	—	62,795
714	3,531	105	—	7	684	796	5,015	35	—	5,050
357	1,594	46	—	3	63	112	2,204	30	—	2,234
3,413	20,583	639	—	41	1,702	2,382	30,566	330	—	30,896
1,693	9,744	300	—	19	372	691	14,333	182	—	14,515
2,081	11,120	337	—	22	442	801	16,090	217	—	16,307
23,441	156,363	4,949	—	317	8,995	14,261	236,626	2,352	—	238,978
3,870	24,285	760	—	49	951	1,760	36,344	441	—	36,785
39,476	239,241	7,438	—	477	9,850	17,765	355,617	4,395	—	360,012
14	642	23	—	1	22	46	1,118	(3)	—	1,115
21,474	157,261	5,056	—	324	4,428	9,808	241,725	2,376	—	244,101
1,596	9,467	293	—	19	336	648	14,011	146	—	14,157
2,003	20,471	688	—	44	366	1,098	32,876	200	—	33,076
4,913	30,621	957	—	61	1,042	2,060	45,764	519	—	46,283
5,564	34,943	1,094	—	70	1,470	2,634	52,299	630	—	52,929
32,354	207,221	6,511	—	417	8,116	15,044	311,296	3,560	—	314,856
157,095	966,093	30,122	—	1,931	36,000	68,053	1,440,164	16,847	—	1,457,011
7,535	44,305	1,369	—	88	1,639	3,096	65,457	830	—	66,287
9,881	60,733	1,893	—	121	2,506	4,520	90,527	1,117	—	91,644
669	1,417	28	—	2	634	664	1,330	14	—	1,344

Tier 2 Public Employees Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts (Continued)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
JORDAN SCHOOL DISTRICT	\$ 10,662,979	5.0435289%	\$ 5,491,867	23,996,448	(8,763,567)	1,854,950	2,214,144	1,782,921
JORDAN UNISERV	16,324	0.0077212	8,408	36,736	(13,416)	2,840	3,390	2,729
JORDAN VALLEY WATER CONSERV	368,920	0.1744973	190,009	830,235	(303,204)	64,178	76,606	61,686
JORDANELLE SSD	106,544	0.0503948	54,875	239,772	(87,565)	18,535	22,124	17,815
JUAB COUNTY	101,516	0.0480165	52,285	228,456	(83,433)	17,660	21,080	16,974
JUAB SCHOOL DISTRICT	423,672	0.2003942	218,208	953,449	(348,202)	73,703	87,974	70,841
JUAB SPECIAL SERVICE FIRE DIST	12,259	0.0057986	6,314	27,589	(10,076)	2,133	2,546	2,050
KAMAS CITY	11,409	0.0053965	5,876	25,676	(9,377)	1,985	2,369	1,908
KANE COUNTY	242,717	0.1148038	125,009	546,221	(199,482)	42,223	50,400	40,584
KANE COUNTY WATER CONSERV DIST	26,780	0.0126668	13,793	60,267	(22,010)	4,659	5,561	4,478
KANE SCHOOL DISTRICT	299,887	0.1418448	154,454	674,879	(246,468)	52,169	62,271	50,143
KANOSH TOWN CORPORATION	6,760	0.0031973	3,482	15,212	(5,556)	1,176	1,404	1,130
KAYSVILLE CITY	183,997	0.0870296	94,766	414,075	(151,221)	32,008	38,207	30,766
KEARNS IMPROVEMENT DIST	46,615	0.0220486	24,009	104,904	(38,311)	8,109	9,679	7,794
LAVERKIN CITY	24,413	0.0115473	12,574	54,941	(20,064)	4,247	5,069	4,082
LAYTON CITY	377,128	0.1783793	194,236	848,705	(309,949)	65,606	78,310	63,058
LEHI CITY	654,793	0.3097134	337,245	1,473,576	(538,154)	113,909	135,966	109,486
LEWISTON CITY	26,360	0.0124682	13,577	59,322	(21,665)	4,586	5,474	4,408
LINDON CITY	91,280	0.0431750	47,013	205,421	(75,020)	15,879	18,954	15,263
LOGAN CITY	674,628	0.3190950	347,461	1,518,212	(554,455)	117,359	140,085	112,802
LOGAN SCHOOL DISTRICT	976,724	0.4619850	503,053	2,198,064	(802,739)	169,913	202,815	163,315
LONE PEAK PS DISTRICT	4,696	0.0022213	2,419	10,569	(3,860)	817	975	785
MANTI CITY	34,502	0.0163192	17,770	77,645	(28,356)	6,002	7,164	5,769
MAPLETON CITY	86,987	0.0411445	44,802	195,760	(71,492)	15,132	18,063	14,545
MARRIOTT-SLATERVILLE CITY	18,876	0.0089280	9,722	42,478	(15,513)	3,284	3,919	3,156
MAYFIELD TOWN	159	0.0000752	82	358	(131)	28	33	27
METRO WATER DIST SLC/SANDY	161,122	0.0762096	82,984	362,595	(132,421)	28,029	33,457	26,941
MIDVALE CITY	281,614	0.1332020	145,043	633,758	(231,450)	48,990	58,477	47,088
MIDVALLEY IMPROVEMENT DISTRICT	13,771	0.0065135	7,093	30,990	(11,318)	2,396	2,859	2,303
MIDWAY CITY	54,566	0.0258093	28,104	122,797	(44,846)	9,492	11,330	9,124
MILITARY INSTALLATION DEVEL	18,743	0.0088654	9,653	42,180	(15,404)	3,261	3,892	3,134
MILLARD CO CARE & REHAB INC	69,830	0.0330294	35,966	157,150	(57,391)	12,148	14,500	11,676
MILLARD COUNTY	184,939	0.0874749	95,251	416,194	(151,995)	32,172	38,402	30,923
MILLARD SCHOOL DISTRICT	643,755	0.3044923	331,560	1,448,734	(529,082)	111,989	133,674	107,640
MILLCREEK CITY	97,317	0.0460303	50,122	219,006	(79,982)	16,929	20,208	16,272
MINERSVILLE TOWN	2,316	0.0010954	1,193	5,212	(1,903)	403	481	387
MOAB VALLEY FIRE PROTECTION	3,046	0.0014408	1,569	6,855	(2,504)	530	633	509
MONA CITY	11,544	0.0054604	5,946	25,980	(9,488)	2,008	2,397	1,930
MONROE CITY	13,509	0.0063896	6,958	30,401	(11,102)	2,350	2,805	2,259
MONTECELLO ACADEMY	220,637	0.1043601	113,637	496,532	(181,335)	38,382	45,815	36,892
MORGAN CITY CORPORATION	46,592	0.0220378	23,997	104,853	(38,293)	8,105	9,675	7,791
MORGAN COUNTY	81,275	0.0384424	41,860	182,904	(66,797)	14,139	16,876	13,590
MORGAN SCHOOL DISTRICT	532,866	0.2520428	274,448	1,199,187	(437,946)	92,698	110,649	89,099
MORONI CITY	8,091	0.0038271	4,167	18,209	(6,650)	1,408	1,680	1,353
MOUNT PLEASANT CITY	35,341	0.0167162	18,202	79,533	(29,046)	6,148	7,339	5,909
MOUNTAIN GREEN SEWER IMP DIST	7,075	0.0033463	3,644	15,921	(5,814)	1,231	1,469	1,183
MOUNTAIN REGIONAL WATER SSD	98,534	0.0466060	50,749	221,745	(80,982)	17,141	20,460	16,476
MOUNTAINLAND ASSN OF GOVT	143,040	0.0676570	73,671	321,903	(117,560)	24,883	29,702	23,917
MOUNTAINLAND TECHNICAL COLLEGE	4,204	0.0019886	2,165	9,461	(3,455)	731	873	703
MT OLYMPUS IMPROVEMENT DIST	57,243	0.0270756	29,482	128,822	(47,046)	9,958	11,886	9,571
MURRAY CITY	561,199	0.2654440	289,040	1,262,948	(461,232)	97,627	116,532	93,836
MURRAY SCHOOL DISTRICT	1,101,451	0.5209802	567,292	2,478,755	(905,248)	191,610	228,714	184,170
MYTON CITY	4,838	0.0022884	2,492	10,888	(3,976)	842	1,005	809
N UT ENVIRONMENTAL RSRC AGCY	33,609	0.0158968	17,310	75,635	(27,622)	5,847	6,979	5,620
NEBO CREDIT UNION	55,184	0.0261018	28,422	124,189	(45,354)	9,600	11,459	9,227
NEBO SCHOOL DISTRICT	5,524,241	2.6129349	2,845,208	12,432,001	(4,540,200)	961,006	1,147,096	923,690
NEPHI CITY	99,446	0.0470375	51,219	223,798	(81,732)	17,300	20,650	16,628
NIBLEY CITY CORPORATION	43,612	0.0206280	22,462	98,145	(35,843)	7,587	9,056	7,292
NOAH WEBSTER ACADEMY INC	77,775	0.0367872	40,057	175,029	(63,921)	13,530	16,150	13,005
NORTH DAVIS CO SEWER DIST	77,994	0.0368906	40,170	175,521	(64,101)	13,568	16,195	13,041

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Nonemployer Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
1,203,230	7,055,245	217,894	—	13,971	286,866	518,731	10,417,658	131,065	—	10,548,723
1,233	10,192	334	—	21	299	654	15,949	109	—	16,058
34,826	237,296	7,539	—	483	7,682	15,704	360,433	3,863	—	364,296
11,566	70,040	2,177	—	140	2,500	4,817	104,093	1,257	—	105,350
10,770	66,484	2,074	—	133	2,220	4,427	99,180	1,121	—	100,301
43,202	275,720	8,658	—	555	10,013	19,226	413,924	4,704	—	418,628
1,603	8,332	251	—	16	224	491	11,977	156	—	12,133
1,164	7,426	233	—	15	238	486	11,147	130	—	11,277
19,313	152,520	4,960	—	318	5,824	11,102	237,133	2,389	—	239,522
2,424	17,122	547	—	35	696	1,278	26,164	285	—	26,449
27,760	192,343	6,128	—	393	7,140	13,661	292,987	3,197	—	296,184
505	4,215	138	—	9	52	199	6,604	45	—	6,649
17,907	118,888	3,760	—	241	4,193	8,194	179,764	1,923	—	181,687
4,124	29,706	953	—	61	1,610	2,624	45,542	419	—	45,961
2,171	15,569	499	—	32	516	1,047	23,852	242	—	24,094
35,252	242,226	7,706	—	494	9,884	18,084	368,451	4,222	—	372,673
64,739	424,100	13,380	—	858	14,912	29,150	639,728	7,066	—	646,794
2,902	17,370	539	—	35	712	1,286	25,754	306	—	26,060
9,698	59,794	1,865	—	120	1,994	3,979	89,180	1,057	—	90,237
61,764	432,010	13,786	—	884	15,332	30,002	659,106	7,020	—	666,126
105,757	641,800	19,959	—	1,280	26,999	48,238	954,253	11,782	—	966,035
639	3,216	96	—	6	163	265	4,588	48	—	4,636
3,356	22,291	705	—	45	854	1,604	33,708	367	—	34,075
6,608	54,348	1,778	—	114	1,266	3,158	84,986	749	—	85,735
2,137	12,496	386	—	25	362	773	18,441	217	—	18,658
291	379	3	—	—	129	132	155	20	—	175
14,447	102,874	3,292	—	211	2,774	6,277	157,415	1,556	—	158,971
25,347	179,902	5,755	—	369	6,353	12,477	275,135	2,887	—	278,022
1,566	9,124	281	—	18	395	694	13,454	177	—	13,631
4,551	34,497	1,115	—	71	1,242	2,428	53,310	519	—	53,829
3,937	14,224	383	—	25	697	1,105	18,312	377	—	18,689
10,276	48,600	1,427	—	91	6,715	8,233	68,224	833	—	69,057
20,747	122,244	3,779	—	242	4,757	8,778	180,684	2,239	—	182,923
66,289	419,592	13,155	—	843	15,631	29,629	628,944	7,082	—	636,026
13,363	66,772	1,989	—	128	2,758	4,875	95,078	1,404	—	96,482
526	1,797	47	—	3	154	204	2,263	49	—	2,312
30	1,702	62	—	4	—	66	2,976	3	—	2,979
1,482	7,817	236	—	15	212	463	11,279	146	—	11,425
2,246	9,660	276	—	18	454	748	13,198	216	—	13,414
24,707	145,796	4,509	—	289	5,707	10,505	215,561	2,563	—	218,124
5,859	31,430	952	—	61	1,184	2,197	45,520	580	—	46,100
5,456	50,061	1,661	—	106	1,221	2,988	79,405	622	—	80,027
57,340	349,786	10,889	—	698	13,463	25,050	520,607	6,289	—	526,896
537	4,978	165	—	11	232	408	7,905	57	—	7,962
4,596	23,992	722	—	46	1,128	1,896	34,528	521	—	35,049
270	4,153	145	—	9	221	375	6,912	7	—	6,919
7,568	61,645	2,014	—	129	1,511	3,654	96,267	833	—	97,100
15,922	94,424	2,923	—	187	3,298	6,408	139,749	1,685	—	141,434
42	2,349	86	—	6	—	92	4,108	4	—	4,112
5,702	37,117	1,170	—	75	1,507	2,752	55,926	644	—	56,570
57,800	365,795	11,468	—	735	14,593	26,796	548,288	6,422	—	554,710
120,884	725,378	22,508	—	1,443	29,891	53,842	1,076,110	13,262	—	1,089,372
538	3,194	99	—	6	142	247	4,727	55	—	4,782
5,509	23,955	687	—	44	1,052	1,783	32,836	495	—	33,331
6,020	36,306	1,128	—	72	1,264	2,464	53,915	653	—	54,568
530,409	3,562,201	112,886	—	7,238	137,248	257,372	5,397,146	59,641	—	5,456,787
11,200	65,778	2,032	—	130	2,774	4,936	97,158	1,237	—	98,395
4,706	28,641	891	—	57	1,334	2,282	42,608	535	—	43,143
6,443	49,128	1,589	—	102	2,827	4,518	75,986	732	—	76,718
7,744	50,548	1,594	—	102	1,740	3,436	76,199	854	—	77,053

Tier 2 Public Employees Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts (Continued)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
NORTH DAVIS FIRE DISTRICT	\$ 1,954	0.0009244%	\$ 1,007	4,398	(1,606)	340	406	327
NORTH EMERY WATER USERS SSD	12,014	0.0056826	6,188	27,037	(9,874)	2,090	2,495	2,009
NORTH FORK SSD	3,820	0.0018068	1,967	8,597	(3,139)	665	793	639
NORTH LOGAN CITY	95,311	0.0450813	49,089	214,491	(78,333)	16,580	19,791	15,937
NORTH OGDEN CITY	131,618	0.0622543	67,788	296,198	(108,172)	22,896	27,330	22,007
NORTH PARK POLICE AGENCY	8,622	0.0040781	4,441	19,403	(7,086)	1,500	1,790	1,442
NORTH POINTE SOLID WASTE	70,746	0.0334625	36,437	159,210	(58,144)	12,307	14,690	11,829
NORTH SANPETE SCHOOL DISTRICT	378,278	0.1789235	194,829	851,295	(310,895)	65,806	78,549	63,251
NORTH SUMMIT SCHOOL DISTRICT	177,851	0.0841227	91,601	400,245	(146,170)	30,939	36,930	29,738
NORTHEASTERN COUNSELING CTR	149,911	0.0709070	77,210	337,366	(123,207)	26,079	31,129	25,066
NUAMES CHARTER SCHOOL	136,583	0.0646029	70,346	307,372	(112,253)	23,760	28,361	22,838
OAKLEY CITY	13,695	0.0064779	7,054	30,821	(11,256)	2,382	2,844	2,290
OGDEN CITY CORP	918,378	0.4343878	473,002	2,066,760	(754,786)	159,763	190,699	153,559
OGDEN SCHOOL DISTRICT	2,544,922	1.2037337	1,310,738	5,727,207	(2,091,591)	442,719	528,447	425,528
OGDEN-WEBER TECH COLLEGE	66,500	0.0314543	34,250	149,655	(54,655)	11,569	13,809	11,119
OQUIRRH REC AND PARKS DISTRICT	21,197	0.0100260	10,917	47,702	(17,421)	3,687	4,401	3,544
ORANGEVILLE CITY	5,077	0.0024014	2,615	11,426	(4,173)	883	1,054	849
ORDERVILLE TOWN	8,604	0.0040698	4,432	19,364	(7,072)	1,497	1,787	1,439
PANGUITCH CITY CORPORATION	19,648	0.0092935	10,120	44,217	(16,148)	3,418	4,080	3,285
PARK CITY	1,366,167	0.6461891	703,631	3,074,483	(1,122,809)	237,661	283,681	228,432
PARK CITY FIRE SERVICE	92,131	0.0435774	47,451	207,336	(75,719)	16,027	19,131	15,405
PARK CITY SCHOOL DISTRICT	1,519,541	0.7187345	782,625	3,419,644	(1,248,863)	264,342	315,529	254,077
PAROWAN CITY	24,458	0.0115684	12,597	55,041	(20,101)	4,255	5,079	4,090
PAYSON CITY	241,653	0.1143006	124,461	543,827	(198,607)	42,038	50,179	40,406
PERRY CITY	32,708	0.0154707	16,846	73,608	(26,882)	5,690	6,792	5,469
PIUTE COUNTY	11,735	0.0055508	6,044	26,410	(9,645)	2,042	2,437	1,962
PIUTE SCHOOL DISTRICT	105,021	0.0496744	54,090	236,344	(86,314)	18,270	21,807	17,560
PLAIN CITY	12,089	0.0057179	6,226	27,205	(9,935)	2,103	2,510	2,021
PLEASANT GROVE CITY	157,569	0.0745294	81,155	354,601	(129,501)	27,411	32,719	26,347
PLEASANT VIEW CITY	45,517	0.0215295	23,443	102,435	(37,409)	7,918	9,452	7,611
POWDER MOUNTAIN WATER & SEWER	28,536	0.0134976	14,697	64,220	(23,453)	4,964	5,926	4,771
PRICE CITY	74,789	0.0353747	38,519	168,308	(61,467)	13,010	15,530	12,505
PRICE RIVER WATER IMPROVE	47,061	0.0222598	24,239	105,909	(38,678)	8,187	9,772	7,869
PROVIDENCE CITY	38,398	0.0181619	19,776	86,412	(31,558)	6,680	7,973	6,420
PROVO CITY CORP	1,278,232	0.6045963	658,341	2,876,590	(1,050,538)	222,363	265,422	213,729
PROVO HOUSING AUTHORITY	27,992	0.0132402	14,417	62,995	(23,006)	4,870	5,813	4,680
PROVO RIVER WATER USERS	37,839	0.0178975	19,488	85,154	(31,098)	6,582	7,857	6,327
PROVO SCHOOL DISTRICT	2,695,726	1.2750631	1,388,408	6,066,583	(2,215,532)	468,953	559,761	450,743
RICH COUNTY	36,316	0.0171774	18,704	81,728	(29,847)	6,318	7,541	6,072
RICH SCHOOL DISTRICT	103,814	0.0491034	53,468	233,628	(85,321)	18,060	21,557	17,358
RICHFIELD CITY	24,273	0.0114809	12,501	54,625	(19,949)	4,223	5,040	4,059
RICHMOND CITY	31,092	0.0147064	16,014	69,971	(25,554)	5,409	6,456	5,199
RIVERDALE CITY	70,026	0.0331220	36,066	157,590	(57,552)	12,182	14,541	11,709
ROOSEVELT CITY	65,806	0.0311260	33,893	148,093	(54,084)	11,448	13,665	11,003
ROY CITY	154,067	0.0728727	79,351	346,719	(126,623)	26,802	31,992	25,761
S UTAH VALLEY ELECTRIC SVC DST	46,180	0.0218430	23,785	103,926	(37,954)	8,034	9,589	7,722
S UTAH VALLEY SOLID WASTE	74,101	0.0350496	38,165	166,761	(60,902)	12,891	15,387	12,390
SALEM CITY	148,009	0.0700073	76,231	333,086	(121,644)	25,748	30,734	24,748
SALINA CITY	24,142	0.0114192	12,434	54,331	(19,842)	4,200	5,013	4,037
SALT LAKE ARTS ACADEMY	66,729	0.0315625	34,368	150,170	(54,843)	11,608	13,856	11,158
SALT LAKE CITY CORP	6,315,996	2.9874303	3,252,994	14,213,801	(5,190,918)	1,098,741	1,311,502	1,056,077
SALT LAKE CITY PUBLIC LIBRARY	329,310	0.1557619	169,608	741,095	(270,650)	57,287	68,381	55,063
SALT LAKE CO SERV AREA 3	8,361	0.0039547	4,306	18,816	(6,872)	1,454	1,736	1,398
SALT LAKE COMMUNITY COLLEGE	443,118	0.2095921	228,224	997,212	(364,184)	77,085	92,012	74,092
SALT LAKE COUNTY	6,924,889	3.2754333	3,566,599	15,584,081	(5,691,348)	1,204,665	1,437,938	1,157,888
SALT LAKE SCHOOL DISTRICT	4,471,326	2.1149120	2,302,914	10,062,474	(3,674,842)	777,839	928,461	747,636
SAN JUAN COUNTY	165,894	0.0784671	85,442	373,336	(136,343)	28,859	34,448	27,739
SAN JUAN MENTAL HEALTH	51,984	0.0245882	26,774	116,987	(42,724)	9,043	10,794	8,692
SAN JUAN SCHOOL DISTRICT	760,370	0.3596506	391,621	1,711,170	(624,924)	132,275	157,889	127,139
SAN RAFAEL SPECIAL SERV DIST	5,718	0.0027045	2,945	12,868	(4,699)	995	1,187	956

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
65	1,138	40	—	3	70	113	1,909	—	—	1,909
1,237	7,831	246	—	16	411	673	11,738	132	—	11,870
491	2,588	78	—	5	601	684	3,732	(4)	—	3,728
10,862	63,170	1,948	—	125	2,493	4,566	93,118	1,167	—	94,285
10,424	82,657	2,690	—	172	2,840	5,702	128,589	1,285	—	129,874
1,341	6,073	176	—	11	233	420	8,424	133	—	8,557
6,968	45,794	1,446	—	93	1,706	3,245	69,118	780	—	69,898
36,339	243,945	7,730	—	496	8,760	16,986	369,575	4,051	—	373,626
17,852	115,459	3,634	—	233	3,972	7,839	173,760	1,930	—	175,690
15,337	97,611	3,063	—	196	3,896	7,155	146,462	1,764	—	148,226
15,566	90,525	2,791	—	179	4,244	7,214	133,440	1,709	—	135,149
1,861	9,377	280	—	18	571	869	13,380	185	—	13,565
93,984	598,005	18,767	—	1,203	24,238	44,208	897,249	10,512	—	907,761
245,177	1,641,871	52,004	—	3,334	67,240	122,578	2,486,371	28,388	—	2,514,759
5,345	41,842	1,359	—	87	1,090	2,536	64,970	591	—	65,561
3,226	14,858	433	—	28	2,049	2,510	20,709	197	—	20,906
580	3,366	104	—	7	329	440	4,960	38	—	4,998
853	5,576	176	—	11	150	337	8,406	81	—	8,487
1,541	12,324	402	—	26	453	881	19,196	190	—	19,386
108,533	858,307	27,917	—	1,790	28,672	58,379	1,334,735	13,192	—	1,347,927
4,779	55,342	1,883	—	121	861	2,865	90,011	493	—	90,504
166,733	1,000,681	31,051	—	1,991	43,725	76,767	1,484,582	18,719	—	1,503,301
3,302	16,726	500	—	32	1,202	1,734	23,895	300	—	24,195
20,998	153,621	4,938	—	317	4,886	10,141	236,094	2,388	—	238,482
2,541	20,492	668	—	43	662	1,373	31,955	279	—	32,234
1,075	7,516	240	—	15	307	562	11,465	132	—	11,597
10,180	67,817	2,146	—	138	2,273	4,557	102,605	1,073	—	103,678
1,799	8,433	247	—	16	688	951	11,811	157	—	11,968
17,328	103,805	3,220	—	206	4,553	7,979	153,944	1,931	—	155,875
3,100	28,081	930	—	60	694	1,684	44,470	365	—	44,835
3,356	19,017	583	—	37	477	1,097	27,880	344	—	28,224
7,836	48,881	1,528	—	98	2,108	3,734	73,068	890	—	73,958
4,310	30,138	962	—	62	1,141	2,165	45,979	488	—	46,467
3,541	24,614	785	—	50	1,094	1,929	37,514	359	—	37,873
110,640	812,154	26,120	—	1,675	30,635	58,430	1,248,824	12,989	—	1,261,813
2,010	17,373	572	—	37	1,628	2,237	27,348	169	—	27,517
3,550	24,316	773	—	50	956	1,779	36,968	366	—	37,334
265,847	1,745,304	55,086	—	3,532	74,070	132,688	2,633,706	30,191	—	2,663,897
2,897	22,828	742	—	48	893	1,683	35,481	341	—	35,822
9,887	66,862	2,121	—	136	2,414	4,671	101,425	1,077	—	102,502
3,701	17,023	496	—	32	837	1,365	23,714	355	—	24,069
2,085	19,149	635	—	41	532	1,208	30,377	253	—	30,630
7,484	45,916	1,431	—	92	1,664	3,187	68,415	800	—	69,215
6,952	43,068	1,345	—	86	3,259	4,690	64,292	561	—	64,853
12,803	97,358	3,148	—	202	3,509	6,859	150,522	1,478	—	152,000
6,030	31,375	944	—	61	1,469	2,474	45,118	657	—	45,775
9,170	49,838	1,514	—	97	1,747	3,358	72,397	887	—	73,284
13,933	95,163	3,025	—	194	2,442	5,661	144,604	1,428	—	146,032
1,880	15,130	493	—	32	472	997	23,587	180	—	23,767
6,620	43,242	1,364	—	87	1,889	3,340	65,194	768	—	65,962
581,526	4,047,846	129,065	—	8,275	142,691	280,031	6,170,685	66,185	—	6,236,870
30,064	210,795	6,729	—	431	7,447	14,607	321,734	3,411	—	325,145
994	5,582	171	—	11	161	343	8,169	100	—	8,269
26,209	269,398	9,055	—	581	15,013	24,649	432,923	3,902	—	436,825
605,928	4,406,419	141,507	—	9,073	160,565	311,145	6,765,569	70,971	—	6,836,540
450,373	2,904,309	91,370	—	5,858	118,186	215,414	4,368,455	50,530	—	4,418,985
15,804	106,850	3,390	—	217	4,831	8,438	162,078	1,749	—	163,827
5,946	34,475	1,062	—	68	1,393	2,523	50,788	608	—	51,396
71,390	488,693	15,538	—	996	19,112	35,646	742,876	8,256	—	751,132
58	3,196	117	—	7	—	124	5,586	5	—	5,591

Tier 2 Public Employees Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts (Continued)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SANDY CITY	\$ 699,735	0.3309709%	\$ 360,392	1,574,716	(575,090)	121,727	145,298	117,000
SANDY SUBURBAN IMP DIST	10,399	0.0049188	5,356	23,403	(8,547)	1,809	2,159	1,739
SANPETE COUNTY	105,893	0.0500867	54,539	238,306	(87,030)	18,421	21,988	17,706
SANTAQUIN CITY	83,529	0.0395088	43,021	187,978	(68,650)	14,531	17,345	13,967
SEVIER COUNTY	154,672	0.0731591	79,662	348,081	(127,120)	26,907	32,117	25,862
SEVIER SCHOOL DISTRICT	672,939	0.3182964	346,591	1,514,412	(553,067)	117,066	139,734	112,520
SIX-COUNTY ASSOC OF GOVT	50,140	0.0237158	25,824	112,837	(41,208)	8,722	10,411	8,384
SLC MOSQUITO ABATEMENT	43,836	0.0207342	22,577	98,651	(36,027)	7,626	9,102	7,330
SMITHFIELD CITY CORP	55,147	0.0260844	28,403	124,106	(45,324)	9,594	11,451	9,221
SNOW COLLEGE	54,291	0.0256795	27,962	122,180	(44,620)	9,445	11,273	9,078
SNYDERVILLE BASIN SRD	134,223	0.0634869	69,130	302,062	(110,314)	23,350	27,871	22,443
SNYDERVILLE BASIN W R D	75,576	0.0357469	38,925	170,079	(62,113)	13,147	15,693	12,637
SO DAVIS METRO FIRE AGENCY	5,047	0.0023874	2,600	11,359	(4,148)	878	1,048	844
SO DAVIS RECREATION CENTER	53,367	0.0252422	27,486	120,099	(43,861)	9,284	11,081	8,923
SO SL VALLEY MOSQ ABATE	11,208	0.0053015	5,773	25,224	(9,212)	1,950	2,327	1,874
SO UTAH VALLEY ANIMAL SVCS SSD	10,638	0.0050317	5,479	23,940	(8,743)	1,851	2,209	1,779
SO UTAH VALLEY POWER SYSTEMS	12,386	0.0058587	6,380	27,875	(10,180)	2,155	2,572	2,071
SOLDIER HOLLOW CHARTER SCHOOL	68,570	0.0324331	35,316	154,312	(56,355)	11,929	14,238	11,465
SOLID WASTE SSD #1	116,910	0.0552980	60,214	263,101	(96,085)	20,338	24,276	19,548
SOUTH DAVIS SEWER DIST	95,684	0.0452581	49,281	215,332	(78,640)	16,645	19,869	15,999
SOUTH DAVIS WATER DIST	5,124	0.0024237	2,639	11,532	(4,211)	891	1,064	857
SOUTH OGDEN CITY	65,161	0.0308210	33,561	146,642	(53,554)	11,336	13,531	10,895
SOUTH OGDEN CONSERV DIST	69,790	0.0330104	35,945	157,059	(57,358)	12,141	14,492	11,669
SOUTH SANPETE SCHOOL DISTRICT	501,629	0.2372677	258,359	1,128,889	(412,273)	87,264	104,162	83,876
SOUTH SUMMIT SCHOOL DISTRICT	244,850	0.1158125	126,108	551,021	(201,234)	42,594	50,842	40,940
SOUTH VALLEY SEWER DISTRICT	176,738	0.0835960	91,027	397,739	(145,255)	30,746	36,699	29,552
SOUTH VALLEY WATER RECLAMATION	93,306	0.0441333	48,056	209,980	(76,685)	16,232	19,375	15,601
SOUTH WEBER CITY	58,797	0.0278107	30,283	132,320	(48,323)	10,228	12,209	9,831
SOUTHEASTERN UTAH AOG	102,524	0.0484934	52,804	230,725	(84,261)	17,835	21,289	17,143
SOUTHEASTERN UTAH HEALTH	147,634	0.0698302	76,038	332,243	(121,336)	25,683	30,656	24,685
SOUTHERN UTAH UNIVERSITY	733,948	0.3471534	378,013	1,651,710	(603,209)	127,679	152,403	122,721
SOUTHWEST EDUC DEVELOPMENT CTR	27,890	0.0131919	14,365	62,765	(22,922)	4,852	5,791	4,663
SOUTHWEST TECHNICAL COLLEGE	199,598	0.0944085	102,801	449,183	(164,043)	34,722	41,446	33,374
SPANISH FORK CITY	527,350	0.2494337	271,607	1,186,773	(433,413)	91,739	109,503	88,176
SPRING CITY	3,726	0.0017624	1,919	8,385	(3,062)	648	774	623
SPRINGVILLE CITY	403,003	0.1906183	207,563	906,937	(331,216)	70,107	83,683	67,385
ST GEORGE HOUSING AUTH	6,254	0.0029583	3,221	14,075	(5,140)	1,088	1,299	1,046
STANSBURY PARK IMPROV DIST	8,629	0.0040814	4,444	19,419	(7,092)	1,501	1,792	1,443
STANSBURY SERVICE AGENCY	61,507	0.0290923	31,678	138,417	(50,550)	10,700	12,772	10,284
STATE OF UTAH	36,538,517	17.2825112	18,818,815	82,227,922	(30,029,855)	6,356,302	7,587,138	6,109,477
SUCCESS ACADEMY	63,740	0.0301488	32,829	143,444	(52,386)	11,088	13,236	10,658
SUMMIT ACADEMY HIGH SCHOOL	161,586	0.0764291	83,223	363,640	(132,802)	28,110	33,553	27,018
SUMMIT ACADEMY INC	507,646	0.2401136	261,458	1,142,429	(417,218)	88,311	105,412	84,882
SUMMIT COUNTY	628,286	0.2971755	323,593	1,413,922	(516,368)	109,298	130,462	105,054
SUMMIT COUNTY SERVICE AREA 3	10,387	0.0049132	5,350	23,376	(8,537)	1,807	2,157	1,737
SUNSET CITY	28,547	0.0135024	14,703	64,243	(23,462)	4,966	5,928	4,773
SW BEHAVIORAL HEALTH CENTER	438,202	0.2072672	225,692	986,150	(360,145)	76,230	90,992	73,270
SW MOSQUITO ABATEMENT/CONTROL	12,648	0.0059823	6,514	28,463	(10,395)	2,200	2,626	2,115
SW UT PUBLIC HEALTH DEPT	153,921	0.0728040	79,276	346,392	(126,503)	26,776	31,961	25,737
SYRACUSE CITY CORP	180,818	0.0855258	93,129	406,921	(148,608)	31,455	37,546	30,234
TAYLOR WEST WEBER WTR IMP DIST	18,465	0.0087340	9,510	41,555	(15,176)	3,212	3,834	3,088
TAYLORSVILLE-BENNION IMP	75,221	0.0355791	38,742	169,281	(61,822)	13,086	15,619	12,577
TIMBERLAKES WATER SSD	26,127	0.0123581	13,457	58,798	(21,473)	4,545	5,425	4,369
TIMPANOGOS SSD	107,443	0.0508200	55,338	241,795	(88,304)	18,691	22,310	17,965
TINTIC SCHOOL DISTRICT	53,622	0.0253631	27,618	120,674	(44,071)	9,328	11,135	8,966
TOOELE CITY	254,563	0.1204066	131,110	572,879	(209,217)	44,284	52,859	42,565
TOOELE COUNTY	591,647	0.2798457	304,722	1,331,469	(486,256)	102,924	122,854	98,927
TOOELE COUNTY HOUSING	17,348	0.0082056	8,935	39,041	(14,258)	3,018	3,602	2,901
TOOELE SCHOOL DISTRICT	2,803,962	1.3262582	1,444,154	6,310,162	(2,304,488)	487,782	582,236	468,841
TOOELE TECHNICAL COLLEGE	62,203	0.0294216	32,037	139,984	(51,123)	10,821	12,916	10,401

Utah Retirement Systems

Deferred Outflows of Resources					Deferred Inflows of Resources			Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions		
71,639	455,664	14,299	—	917	19,128	34,344	683,637	8,205	—	691,842	
519	6,226	213	—	14	137	364	10,160	69	—	10,229	
10,459	68,574	2,164	—	139	2,962	5,265	103,457	1,184	—	104,641	
8,631	54,474	1,707	—	109	1,831	3,647	81,607	899	—	82,506	
13,293	98,179	3,161	—	203	3,091	6,455	151,114	1,477	—	152,591	
70,907	440,227	13,751	—	882	16,127	30,760	657,457	7,650	—	665,107	
7,438	34,955	1,025	—	66	1,451	2,542	48,986	739	—	49,725	
3,896	27,954	896	—	57	1,020	1,973	42,828	456	—	43,284	
5,175	35,441	1,127	—	72	1,762	2,961	53,879	552	—	54,431	
4,147	33,943	1,109	—	71	2,150	3,330	53,042	534	—	53,576	
11,219	84,883	2,743	—	176	4,072	6,991	131,135	1,120	—	132,255	
5,667	47,144	1,544	—	99	1,340	2,983	73,837	674	—	74,511	
631	3,401	103	—	7	134	244	4,931	67	—	4,998	
5,145	34,433	1,091	—	70	1,057	2,218	52,139	562	—	52,701	
1,303	7,454	229	—	15	929	1,173	10,951	105	—	11,056	
622	6,461	217	—	14	155	386	10,393	78	—	10,471	
1,111	7,909	253	—	16	141	410	12,101	97	—	12,198	
9,173	46,805	1,401	—	90	2,238	3,729	66,992	997	—	67,989	
11,825	75,987	2,389	—	153	2,982	5,524	114,221	1,028	—	115,249	
14,054	66,567	1,955	—	125	3,543	5,623	93,483	1,411	—	94,894	
798	3,610	105	—	7	175	287	5,006	82	—	5,088	
6,550	42,312	1,332	—	85	1,684	3,101	63,662	713	—	64,375	
6,717	45,019	1,426	—	91	1,880	3,397	68,185	783	—	68,968	
51,346	326,648	10,251	—	657	12,308	23,216	490,088	5,730	—	495,818	
20,801	155,177	5,003	—	321	5,368	10,692	239,216	2,465	—	241,681	
17,683	114,680	3,612	—	232	4,769	8,613	172,672	1,924	—	174,596	
8,107	59,315	1,907	—	122	2,837	4,866	91,160	926	—	92,086	
5,039	37,307	1,201	—	77	1,151	2,429	57,444	554	—	57,998	
11,068	67,335	2,095	—	134	2,004	4,233	100,166	1,125	—	101,291	
16,722	97,746	3,017	—	193	3,204	6,414	144,238	1,727	—	145,965	
74,257	477,060	14,998	—	962	17,799	33,759	717,062	8,270	—	725,332	
2,841	18,147	570	—	37	1,137	1,744	27,249	301	—	27,550	
20,917	130,459	4,079	—	262	4,494	8,835	195,005	2,240	—	197,245	
54,010	343,428	10,776	—	691	13,109	24,576	515,218	5,874	—	521,092	
279	2,324	76	—	5	361	442	3,640	2	—	3,642	
38,089	259,264	8,235	—	528	9,662	18,425	393,732	4,267	—	397,999	
1,013	4,446	128	—	8	218	354	6,111	101	—	6,212	
770	5,506	176	—	11	94	281	8,430	84	—	8,514	
7,334	41,090	1,257	—	81	1,643	2,981	60,092	718	—	60,810	
3,432,636	23,485,553	746,635	—	47,870	913,238	1,707,743	35,697,882	393,217	—	36,091,099	
7,290	42,272	1,303	—	84	1,763	3,150	62,274	815	—	63,089	
14,129	102,810	3,302	—	212	3,936	7,450	157,868	1,657	—	159,525	
51,743	330,348	10,374	—	665	15,447	26,486	495,966	6,166	—	502,132	
53,255	398,069	12,839	—	823	12,567	26,229	613,831	5,936	—	619,767	
1,098	6,799	212	—	14	155	381	10,148	96	—	10,244	
2,067	17,734	583	—	37	441	1,061	27,890	243	—	28,133	
36,143	276,635	8,954	—	574	9,516	19,044	428,121	4,202	—	432,323	
2,196	9,137	258	—	17	957	1,232	12,357	187	—	12,544	
18,869	103,343	3,145	—	202	4,460	7,807	150,380	2,021	—	152,401	
15,109	114,344	3,695	—	237	3,455	7,387	176,658	1,711	—	178,369	
1,900	12,034	377	—	24	413	814	18,041	215	—	18,256	
8,044	49,326	1,537	—	99	2,002	3,638	73,490	887	—	74,377	
3,285	17,624	534	—	34	734	1,302	25,526	352	—	25,878	
8,542	67,508	2,196	—	141	2,474	4,811	104,971	1,061	—	106,032	
5,158	34,587	1,096	—	70	1,021	2,187	52,389	538	—	52,927	
21,429	161,137	5,202	—	334	5,252	10,788	248,706	2,457	—	251,163	
53,666	378,371	12,090	—	775	13,562	26,427	578,035	6,112	—	584,147	
1,790	11,311	355	—	23	860	1,238	16,949	204	—	17,153	
288,614	1,827,473	57,298	—	3,674	66,533	127,505	2,739,452	30,952	—	2,770,404	
4,758	38,896	1,271	—	81	1,173	2,525	60,772	520	—	61,292	

Tier 2 Public Employees Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts (Continued)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
TOQUERVILLE CITY	\$ 42,521	0.0201121%	\$ 21,900	95,691	(34,947)	7,397	8,829	7,110
TORREY TOWN	3,764	0.0017804	1,939	8,471	(3,094)	655	782	629
TOWN OF ALTA	21,712	0.0102697	11,183	48,862	(17,844)	3,777	4,508	3,630
TOWN OF APPLE VALLEY	7,450	0.0035240	3,837	16,767	(6,123)	1,296	1,547	1,246
TOWN OF BRIAN HEAD	25,792	0.0121994	13,284	58,043	(21,198)	4,487	5,356	4,313
TOWN OF DANIEL	2,820	0.0013336	1,452	6,345	(2,317)	490	585	471
TOWN OF GARDEN CITY	30,763	0.0145507	15,844	69,230	(25,283)	5,352	6,388	5,144
TOWN OF GOSHEN	6,611	0.0031271	3,405	14,878	(5,434)	1,150	1,373	1,105
TOWN OF HIDEOUT	19,512	0.0092293	10,050	43,912	(16,037)	3,394	4,052	3,263
TOWN OF MANILA	10,199	0.0048240	5,253	22,952	(8,382)	1,774	2,118	1,705
TOWN OF MANTUA	3,748	0.0017729	1,930	8,435	(3,081)	652	778	627
TOWN OF PARAGONAH	3,423	0.0016192	1,763	7,704	(2,813)	596	711	572
TOWN OF RANDOLPH	142	0.0000672	73	320	(117)	25	30	24
TOWN OF SPRINGDALE	67,292	0.0318287	34,658	151,437	(55,305)	11,706	13,973	11,252
TRANS-JORDAN CITIES	101,927	0.0482108	52,496	229,381	(83,770)	17,731	21,165	17,043
TREMONTON CITY	47,551	0.0224915	24,491	107,012	(39,081)	8,272	9,874	7,951
TRICOUNTY HEALTH DEPT	94,795	0.0448376	48,823	213,331	(77,909)	16,491	19,684	15,850
TRIDELL-LAPOINT WATER	12,300	0.0058180	6,335	27,681	(10,109)	2,140	2,554	2,057
UINTAH ANIMAL CONTROL/SHELTER	10,019	0.0047392	5,160	22,548	(8,235)	1,743	2,081	1,675
UINTAH BASIN ASSN OF GOVT	122,032	0.0577205	62,851	274,627	(100,294)	21,229	25,340	20,405
UINTAH BASIN ASST COUNCIL	2,200	0.0010404	1,133	4,950	(1,808)	383	457	368
UINTAH BASIN TECHNICAL COLLEGE	245,343	0.1160460	126,362	552,132	(201,640)	42,680	50,945	41,023
UINTAH CO CARE CENTER SSD	121,247	0.0573492	62,447	272,860	(99,649)	21,092	25,177	20,273
UINTAH COUNTY	383,549	0.1814165	197,543	863,156	(315,227)	66,723	79,643	64,132
UINTAH RECREATION DISTRICT	37,138	0.0175660	19,128	83,577	(30,522)	6,461	7,712	6,210
UINTAH SCHOOL DISTRICT	1,249,062	0.5907993	643,318	2,810,945	(1,026,565)	217,289	259,365	208,852
UINTAH WATER CONSERV DIST	22,944	0.0108521	11,817	51,633	(18,856)	3,991	4,764	3,836
UNIFIED FIRE AUTHORITY	93,054	0.0440139	47,926	209,412	(76,478)	16,188	19,322	15,559
UNIFIED POLICE DEPARTMENT	143,932	0.0680790	74,131	323,911	(118,293)	25,039	29,887	24,066
UNIVERSITY OF UTAH	2,047,619	0.9685122	1,054,607	4,608,054	(1,682,874)	356,207	425,184	342,376
UNIVERSITY OF UTAH HOSPITAL	163,470	0.0773206	84,194	367,881	(134,351)	28,438	33,944	27,333
UPPER COUNTRY WATER DIST	2,221	0.0010503	1,144	4,997	(1,825)	386	461	371
USU SPACE DYNAMICS LAB	68,214	0.0322650	35,133	153,513	(56,063)	11,867	14,165	11,406
UT MUNICIPAL POWER AGENCY	73,437	0.0347353	37,823	165,266	(60,356)	12,775	15,249	12,279
UTAH ARTS ACADEMY	68,339	0.0323238	35,197	153,792	(56,165)	11,888	14,190	11,427
UTAH ASSOCIATION OF COUNTIES	38,101	0.0180214	19,623	85,743	(31,314)	6,628	7,912	6,371
UTAH CO ACADEMY OF SCIENCES	110,658	0.0523406	56,993	249,030	(90,946)	19,250	22,978	18,503
UTAH CO HOUSING AUTHORITY	49,121	0.0232339	25,299	110,544	(40,371)	8,545	10,200	8,213
UTAH COMMUNICATIONS AUTHORITY	97,474	0.0461047	50,203	219,360	(80,111)	16,957	20,240	16,298
UTAH COUNTIES INDEMNITY POOL	1,095	0.0005178	564	2,464	(900)	190	227	183
UTAH COUNTY	1,908,235	0.9025845	982,819	4,294,379	(1,568,318)	331,960	396,241	319,070
UTAH EDUCATION ASSOCIATION	24,346	0.0115157	12,539	54,790	(20,010)	4,235	5,055	4,071
UTAH HOUSING CORPORATION	341,653	0.1615999	175,965	768,871	(280,794)	59,435	70,943	57,127
UTAH LAKE COMMISSION	914	0.0004323	471	2,057	(751)	159	190	153
UTAH LEAGUE CITIES/TOWNS	12,577	0.0059490	6,478	28,305	(10,337)	2,188	2,612	2,103
UTAH LOCAL GOVERNMENTS TRUST	16,179	0.0076525	8,333	36,410	(13,297)	2,814	3,360	2,705
UTAH RETIREMENT SYSTEMS	957,459	0.4528728	493,130	2,154,709	(786,906)	166,561	198,814	160,094
UTAH SAFETY COUNCIL	22,866	0.0108155	11,777	51,459	(18,793)	3,978	4,748	3,823
UTAH SCHOOL BOARD ASSOCIATION	26,073	0.0123323	13,429	58,675	(21,428)	4,536	5,414	4,360
UTAH SCHOOL BOARD RISK MGMT	26,299	0.0124394	13,545	59,185	(21,615)	4,575	5,461	4,397
UTAH SCHOOL EMPLOYEES ASSN	23,545	0.0111366	12,127	52,986	(19,351)	4,096	4,889	3,937
UTAH STATE FAIR CORP	31,389	0.0148467	16,166	70,639	(25,797)	5,460	6,518	5,248
UTAH STATE UNIVERSITY	692,750	0.3276670	356,795	1,558,997	(569,350)	120,512	143,848	115,832
UTAH TECH UNIVERSITY	146,839	0.0694542	75,628	330,454	(120,683)	25,544	30,491	24,553
UTAH VALLEY UNIVERSITY	587,906	0.2780763	302,796	1,323,051	(483,182)	102,273	122,077	98,302
UTAH ZOOLOGICAL SOCIETY	319,794	0.1512609	164,707	719,679	(262,829)	55,632	66,405	53,472
UTOPIA	406,608	0.1923235	209,420	915,050	(334,179)	70,734	84,431	67,988
VALLEY EMERGENCY COMM CTR	494,785	0.2340307	254,835	1,113,487	(406,649)	86,074	102,741	82,731
VERNAL CITY	72,065	0.0340864	37,116	162,179	(59,228)	12,537	14,964	12,050
VINEYARD TOWN	100,426	0.0475008	51,723	226,003	(82,537)	17,470	20,853	16,792

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
2,572	25,908	869	—	56	1,108	2,033	41,543	247	—	41,790
272	2,338	77	—	5	113	195	3,678	33	—	3,711
1,691	13,606	444	—	28	306	778	21,213	186	—	21,399
990	5,079	152	—	10	1,342	1,504	7,279	(11)	—	7,268
1,683	15,839	527	—	34	292	853	25,198	190	—	25,388
28	1,574	58	—	4	—	62	2,755	3	—	2,758
1,910	18,794	629	—	40	488	1,157	30,055	226	—	30,281
951	4,579	135	—	9	882	1,026	6,459	50	—	6,509
1,547	12,256	399	—	26	174	599	19,064	137	—	19,201
1,099	6,696	208	—	13	383	604	9,964	105	—	10,069
932	2,989	77	—	5	213	295	3,662	83	—	3,745
384	2,263	70	—	4	101	175	3,345	43	—	3,388
1	80	3	—	—	—	3	139	—	—	139
5,854	42,785	1,375	—	88	1,321	2,784	65,744	653	—	66,397
10,327	66,266	2,083	—	134	2,572	4,789	99,582	1,144	—	100,726
4,647	30,744	972	—	62	1,160	2,194	46,457	541	—	46,998
12,936	64,961	1,937	—	124	2,138	4,199	92,614	1,082	—	93,696
873	7,624	251	—	16	374	641	12,017	115	—	12,132
769	6,268	205	—	13	453	671	9,789	60	—	9,849
15,212	82,186	2,494	—	160	3,839	6,493	119,225	1,625	—	120,850
319	1,527	45	—	3	477	525	2,149	10	—	2,159
21,542	156,190	5,013	—	321	6,124	11,458	239,699	2,593	—	242,292
10,640	77,182	2,478	—	159	3,321	5,958	118,458	1,324	—	119,782
31,022	241,520	7,838	—	503	15,821	24,162	374,725	3,566	—	378,291
2,436	22,819	759	—	49	1,801	2,609	36,283	267	—	36,550
112,522	798,028	25,524	—	1,637	32,722	59,883	1,220,325	13,528	—	1,233,853
2,984	15,575	469	—	30	682	1,181	22,416	271	—	22,687
13,867	64,936	1,902	—	122	6,457	8,481	90,913	1,238	—	92,151
15,131	94,123	2,941	—	189	15,191	18,321	140,621	893	—	141,514
150,673	1,274,440	41,842	—	2,683	189,800	234,325	2,000,510	13,820	—	2,014,330
12,287	102,002	3,340	—	214	1,296	4,850	159,710	1,173	—	160,883
23	1,241	45	—	3	—	48	2,169	2	—	2,171
4,374	41,812	1,394	—	89	1,154	2,637	66,645	565	—	67,210
9,007	49,310	1,501	—	96	6,506	8,103	71,747	495	—	72,242
5,827	43,332	1,396	—	90	2,011	3,497	66,766	726	—	67,492
7,556	28,467	779	—	50	1,608	2,437	37,224	724	—	37,948
13,468	74,199	2,261	—	145	2,828	5,234	108,112	1,407	—	109,519
4,519	31,477	1,004	—	64	3,158	4,226	47,991	410	—	48,401
13,697	67,192	1,992	—	128	3,191	5,311	95,232	1,270	—	96,502
430	1,030	22	—	1	225	248	1,070	45	—	1,115
215,885	1,263,156	38,994	—	2,500	50,386	91,880	1,864,333	22,999	—	1,887,332
2,619	15,980	498	—	32	2,723	3,253	23,786	168	—	23,954
29,147	216,652	6,982	—	448	7,819	15,249	333,793	3,452	—	337,245
224	726	19	—	1	324	344	893	(3)	—	890
1,299	8,202	257	—	16	577	850	12,288	114	—	12,402
4,209	13,088	331	—	21	2,384	2,736	15,807	453	—	16,260
88,395	613,864	19,565	—	1,254	25,341	46,160	935,431	10,548	—	945,979
2,429	14,978	467	—	30	1,636	2,133	22,340	207	—	22,547
2,578	16,888	533	—	34	1,619	2,186	25,473	234	—	25,707
3,383	17,816	537	—	34	1,269	1,840	25,694	361	—	26,055
791	13,713	481	—	31	1,204	1,716	23,003	(19)	—	22,984
4,185	21,411	641	—	41	1,760	2,442	30,667	365	—	31,032
44,957	425,149	14,156	—	908	28,736	43,800	676,812	6,352	—	683,164
13,945	94,533	3,001	—	192	3,533	6,726	143,461	1,593	—	145,054
41,431	364,083	12,014	—	770	20,968	33,752	574,380	5,723	—	580,103
20,630	196,139	6,535	—	419	8,527	15,481	312,437	2,593	—	315,030
40,625	263,778	8,309	—	533	8,541	17,383	397,254	4,404	—	401,658
48,171	319,717	10,111	—	648	11,938	22,697	483,402	5,577	—	488,979
6,553	46,104	1,473	—	94	1,860	3,427	70,407	763	—	71,170
13,070	68,185	2,052	—	132	3,319	5,503	98,115	1,408	—	99,523

Tier 2 Public Employees Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts (Concluded)

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
WASATCH BEHAVIORAL HEALTH	\$ 1,057,898	0.5003798%	\$ 544,860	2,380,741	(869,453)	184,034	219,670	176,888
WASATCH COUNTY	519,378	0.2456630	267,501	1,168,832	(426,861)	90,352	107,848	86,844
WASATCH COUNTY FIRE DISTRICT	22,106	0.0104562	11,386	49,749	(18,169)	3,846	4,590	3,696
WASATCH FRONT REGIONAL COUNCIL	97,720	0.0462208	50,330	219,912	(80,313)	16,999	20,291	16,339
WASATCH FRONT WASTE/RECYCLING	281,545	0.1331693	145,007	633,602	(231,393)	48,978	58,462	47,076
WASATCH INTEGRATED WASTE MGMT	214,727	0.1015644	110,593	483,230	(176,477)	37,354	44,587	35,904
WASATCH SCHOOL DISTRICT	1,751,614	0.8285035	902,152	3,941,911	(1,439,596)	304,714	363,719	292,882
WASHINGTON CITY	360,264	0.1704029	185,551	810,755	(296,090)	62,672	74,808	60,239
WASHINGTON CO SOLID WASTE	45,765	0.0216465	23,571	102,991	(37,613)	7,961	9,503	7,652
WASHINGTON CO WAT CON DIST	101,769	0.0481360	52,415	229,025	(83,640)	17,704	21,132	17,016
WASHINGTON COUNTY	548,440	0.2594092	282,469	1,234,235	(450,746)	95,408	113,882	91,703
WASHINGTON SCHOOL DISTRICT	5,343,134	2.5272722	2,751,931	12,024,429	(4,391,354)	929,501	1,109,490	893,408
WASTE MANAGEMENT SERV DIST #5	3,940	0.0018637	2,029	8,867	(3,238)	685	818	659
WAYNE COUNTY	49,841	0.0235744	25,670	112,164	(40,963)	8,670	10,349	8,334
WAYNE SCHOOL DISTRICT	103,698	0.0490487	53,409	233,367	(85,226)	18,040	21,533	17,339
WEBER AREA DISPATCH 911	22,481	0.0106334	11,579	50,592	(18,476)	3,911	4,668	3,759
WEBER BASIN WATER CONSERV	205,950	0.0974134	106,073	463,480	(169,264)	35,827	42,765	34,436
WEBER CO MOSQUITO ABATE	15,651	0.0074027	8,061	35,221	(12,863)	2,723	3,250	2,617
WEBER COUNTY CORP	1,799,667	0.8512322	926,901	4,050,051	(1,479,089)	313,073	373,697	300,916
WEBER COUNTY SCHOOL DISTRICT	4,904,906	2.3199930	2,526,226	11,038,222	(4,031,188)	853,266	1,018,493	820,133
WEBER FIRE DISTRICT	1,494	0.0007066	769	3,362	(1,228)	260	310	250
WEBER HUMAN SERVICES	657,704	0.3110902	338,744	1,480,126	(540,546)	114,415	136,571	109,972
WEBER STATE UNIVERSITY	419,870	0.1985960	216,250	944,894	(345,078)	73,041	87,185	70,205
WELLINGTON CITY	10,385	0.0049119	5,349	23,370	(8,535)	1,807	2,156	1,736
WELLSVILLE CITY CORP	15,576	0.0073671	8,022	35,052	(12,801)	2,710	3,234	2,604
WEST BOUNTIFUL CITY	47,208	0.0223289	24,314	106,238	(38,798)	8,212	9,803	7,893
WEST KANE COUNTY SSD #1	18,781	0.0088833	9,673	42,266	(15,436)	3,267	3,900	3,140
WEST POINT CITY	59,584	0.0281830	30,688	134,091	(48,970)	10,365	12,373	9,963
WEST VALLEY CITY	799,506	0.3781618	411,778	1,799,244	(657,089)	139,083	166,016	133,683
WHITE CITY WATER IMP DIST	16,763	0.0079288	8,634	37,724	(13,777)	2,916	3,481	2,803
WILLARD CITY CORP	13,860	0.0065559	7,139	31,192	(11,391)	2,411	2,878	2,318
WOODS CROSS CITY	34,277	0.0162129	17,654	77,139	(28,171)	5,963	7,118	5,731
WORKERS' COMPENSATION FUND	847,087	0.4006676	436,284	1,906,324	(696,195)	147,361	175,896	141,639
	\$211,419,012	100.0000000%	\$ 108,889,373	475,786,866	(173,758,628)	36,778,811	43,900,687	35,350,669
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
BIG PLAINS WATER & SEWER SSD	\$ —	0.0000000%	\$ —	—	—	—	—	—
CANYONLANDS CARE CENTER	—	0.0000000	—	—	—	—	—	—
CENTERFIELD CITY	—	0.0000000	—	—	—	—	—	—
GRAND CO CEMETERY MTCE DIST	—	0.0000000	—	—	—	—	—	—
LIBERTY ACADEMY CHARTER	—	0.0000000	—	—	—	—	—	—
MAESER WATER IMPROVE DIST	—	0.0000000	—	—	—	—	—	—
MENDON CITY	—	0.0000000	—	—	—	—	—	—
MILLVILLE CITY	—	0.0000000	—	—	—	—	—	—
MOAB MOSQUITO ABATEMENT DISTRI	—	0.0000000	—	—	—	—	—	—
N TOOEELE FIRE PROTECTION SD	—	0.0000000	—	—	—	—	—	—
NORTH VIEW FIRE DISTRICT	—	0.0000000	—	—	—	—	—	—
OGDEN WEBER/NEA/UEA UNISERV	—	0.0000000	—	—	—	—	—	—
RECREATION & HABILITATION SRVS	—	0.0000000	—	—	—	—	—	—
UINTAH FIRE SUPPRESSION SSD	—	0.0000000	—	—	—	—	—	—
UINTAH HIGHLANDS IMPROV DIST	—	0.0000000	—	—	—	—	—	—
UINTAH TRANSPORTATION SSD	—	0.0000000	—	—	—	—	—	—
UT PUBLIC EMPLOYEES ASSN	—	0.0000000	—	—	—	—	—	—
UTAH DAIRY COMMISSION	—	0.0000000	—	—	—	—	—	—
VALLEY MENTAL HEALTH	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$211,419,012	100.0000000%	\$ 108,889,373	475,786,866	(173,758,628)	36,778,811	43,900,687	35,350,669

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources					Deferred Inflows of Resources			Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
95,342	675,934	21,618	—	1,386	20,013	43,017	1,033,559	10,287	—	1,043,846	
48,512	333,556	10,613	—	680	12,266	23,559	507,429	5,593	—	513,022	
3,252	15,384	452	—	29	548	1,029	21,598	317	—	21,915	
6,639	60,268	1,997	—	128	2,355	4,480	95,471	757	—	96,228	
25,890	180,406	5,753	—	369	6,858	12,980	275,068	3,023	—	278,091	
28,259	146,104	4,388	—	281	7,181	11,850	209,786	2,572	—	212,358	
175,054	1,136,369	35,794	—	2,295	41,470	79,559	1,711,315	19,265	—	1,730,580	
34,639	232,358	7,362	—	472	7,156	14,990	351,976	3,665	—	355,641	
5,327	30,443	935	—	60	1,136	2,131	44,712	547	—	45,259	
10,078	65,930	2,080	—	133	2,755	4,968	99,427	1,135	—	100,562	
51,591	352,584	11,207	—	719	12,957	24,883	535,823	5,740	—	541,563	
566,263	3,498,662	109,185	—	7,001	135,280	251,466	5,220,206	61,234	—	5,281,440	
1,181	3,343	81	—	5	234	320	3,850	107	—	3,957	
4,016	31,369	1,018	—	65	916	1,999	48,694	468	—	49,162	
9,151	66,063	2,119	—	136	2,136	4,391	101,313	1,048	—	102,361	
16,711	29,049	459	—	29	24,849	25,337	21,964	(49)	—	21,915	
19,278	132,306	4,209	—	270	4,441	8,920	201,212	2,118	—	203,330	
1,570	10,160	320	—	21	285	626	15,291	162	—	15,453	
145,282	1,132,968	36,775	—	2,358	36,468	75,601	1,758,262	16,944	—	1,775,206	
515,162	3,207,054	100,230	—	6,426	119,515	226,171	4,792,060	56,189	—	4,848,249	
946	1,766	31	—	2	1,241	1,274	1,460	(14)	—	1,446	
68,602	429,560	13,440	—	862	18,496	32,798	642,572	7,950	—	650,522	
29,756	260,187	8,580	—	550	10,746	19,876	410,210	3,865	—	414,075	
772	6,471	212	—	14	268	494	10,146	101	—	10,247	
2,938	11,486	318	—	20	688	1,026	15,217	279	—	15,496	
4,911	30,819	965	—	62	1,347	2,374	46,121	558	—	46,679	
2,534	12,841	384	—	25	654	1,063	18,349	269	—	18,618	
5,399	38,100	1,218	—	78	1,539	2,835	58,213	621	—	58,834	
73,589	512,371	16,338	—	1,048	19,432	36,818	781,112	8,491	—	789,603	
2,138	11,338	343	—	22	475	840	16,377	235	—	16,612	
727	8,334	283	—	18	217	518	13,542	74	—	13,616	
3,701	22,513	700	—	45	847	1,592	33,489	365	—	33,854	
74,765	539,661	17,310	—	1,110	35,630	54,050	827,599	8,416	—	836,015	
20,854,783	136,884,950	4,320,264	—	277,001	5,540,402	10,137,667	206,554,938	2,323,453	—	208,878,391	
223	223	—	—	—	351	351	—	(12)	—	(12)	
—	—	—	—	—	227	227	—	(61)	—	(61)	
97	97	—	—	—	185	185	—	(7)	—	(7)	
407	407	—	—	—	1,084	1,084	—	(45)	—	(45)	
3,176	3,176	—	—	—	6,060	6,060	—	(133)	—	(133)	
—	—	—	—	—	38	38	—	(9)	—	(9)	
138	138	—	—	—	346	346	—	(18)	—	(18)	
511	511	—	—	—	509	509	—	17	—	17	
179	179	—	—	—	279	279	—	(9)	—	(9)	
497	497	—	—	—	118	118	—	39	—	39	
489	489	—	—	—	539	539	—	—	—	—	
121	121	—	—	—	247	247	—	(9)	—	(9)	
53	53	—	—	—	66	66	—	3	—	3	
46	46	—	—	—	71	71	—	(2)	—	(2)	
446	446	—	—	—	964	964	—	(36)	—	(36)	
1,719	1,719	—	—	—	4,144	4,144	—	(140)	—	(140)	
746	746	—	—	—	1,402	1,402	—	(41)	—	(41)	
278	278	—	—	—	658	658	—	(25)	—	(25)	
2,971	2,971	—	—	—	7,268	7,268	—	(663)	—	(663)	
20,866,883	136,897,050	4,320,264	—	277,001	5,564,958	10,162,223	206,554,938	2,322,301	—	208,877,239	

Tier 2 Public Safety and Firefighter Contributory Retirement System

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions
AMERICAN FORK CITY	\$ 498,185	1.1499815%	\$ 95,937	767,945	(438,150)	46,278	99,538	60,673
BEAVER COUNTY	226,006	0.5216995	43,522	348,385	(198,771)	20,995	45,156	27,525
BIG WATER MUNICIPAL CORP	8,347	0.0192669	1,607	12,866	(7,341)	775	1,668	1,017
BLANDING CITY	19,415	0.0448174	3,739	29,929	(17,076)	1,804	3,879	2,365
BOX ELDER COUNTY	275,460	0.6358567	53,046	424,618	(242,265)	25,589	55,037	33,548
BRIGHAM CITY	194,560	0.4491111	37,467	299,911	(171,114)	18,073	38,873	23,695
CACHE COUNTY	545,444	1.2590722	105,037	840,794	(479,714)	50,669	108,981	66,429
CARBON COUNTY	135,997	0.3139282	26,189	209,638	(119,609)	12,633	27,172	16,563
CEDAR CITY	233,579	0.5391807	44,981	360,059	(205,431)	21,698	46,669	28,447
CEDAR MTN FIRE PROTECTION DIST	90,514	0.2089371	17,430	139,526	(79,606)	8,408	18,085	11,024
CENTERVILLE CITY	47,716	0.1101450	9,189	73,554	(41,966)	4,433	9,534	5,811
CITY OF BOUNTIFUL	130,798	0.3019258	25,188	201,623	(115,036)	12,150	26,134	15,930
CITY OF DRAPER	372,750	0.8604353	71,781	574,589	(327,831)	34,626	74,476	45,397
CITY OF HARRISVILLE	29,790	0.0687652	5,737	45,921	(26,200)	2,767	5,952	3,628
CITY OF HELPER	23,045	0.0531967	4,438	35,524	(20,268)	2,141	4,605	2,807
CITY OF KANAB	80,318	0.1854007	15,467	123,808	(70,639)	7,461	16,048	9,782
CITY OF MOAB	62,708	0.1447522	12,076	96,664	(55,151)	5,825	12,529	7,637
CITY OF NAPLES	24,464	0.0564703	4,711	37,710	(21,516)	2,273	4,888	2,979
CITY OF NORTH SALT LAKE	86,616	0.1999402	16,680	133,518	(76,178)	8,046	17,306	10,549
CITY OF OREM	716,189	1.6532103	137,918	1,103,995	(629,883)	66,530	143,096	87,223
CITY OF RIVERTON	104,587	0.2414227	20,141	161,219	(91,983)	9,716	20,897	12,737
CITY OF SANTA CLARA	85,207	0.1966880	16,409	131,346	(74,939)	7,915	17,025	10,377
CITY OF SARATOGA SPRINGS	324,709	0.7495403	62,530	500,535	(285,579)	30,164	64,877	39,546
CITY OF SOUTH JORDAN	755,599	1.7441811	145,507	1,164,744	(664,543)	70,191	150,970	92,023
CITY OF SOUTH SALT LAKE	495,023	1.1426835	95,328	763,071	(435,369)	45,985	98,906	60,288
CITY OF ST GEORGE	811,298	1.8727539	156,233	1,250,604	(713,530)	75,365	162,099	98,806
CITY OF TAYLORSVILLE	270,607	0.6246530	52,111	417,136	(237,997)	25,138	54,068	32,957
CITY OF WENDOVER	13,752	0.0317438	2,648	21,198	(12,095)	1,277	2,748	1,675
CITY OF WEST JORDAN	1,056,093	2.4378241	203,374	1,627,951	(928,825)	98,105	211,009	128,620
CLEARFIELD CITY	191,759	0.4426446	36,927	295,593	(168,650)	17,813	38,314	23,354
CLINTON CITY	163,474	0.3773545	31,481	251,993	(143,774)	15,186	32,662	19,909
COTTONWOOD HEIGHTS CITY	146,813	0.3388956	28,272	226,311	(129,121)	13,638	29,334	17,880
DAGGETT COUNTY	5,348	0.0123451	1,030	8,244	(4,704)	497	1,069	651
DAMMERON VALLEY FIRE SSD	7,007	0.0161739	1,349	10,801	(6,162)	651	1,400	853
DAVIS COUNTY	679,742	1.5690767	130,899	1,047,812	(597,828)	63,144	135,813	82,784
DUCHESNE COUNTY	173,976	0.4015957	33,503	268,181	(153,010)	16,161	34,761	21,188
EAST CARBON CITY	11,119	0.0256676	2,141	17,141	(9,780)	1,033	2,222	1,354
EMERY COUNTY	154,146	0.3558228	29,684	237,614	(135,571)	14,319	30,799	18,773
ENOCH CITY	35,610	0.0822008	6,858	54,893	(31,319)	3,308	7,115	4,337
EPHRAIM CITY	16,888	0.0389824	3,252	26,032	(14,853)	1,569	3,374	2,057
FAIRVIEW CITY	5,954	0.0137438	1,147	9,178	(5,236)	553	1,190	725
FARMINGTON CITY	184,258	0.4253317	35,483	284,032	(162,054)	17,117	36,815	22,440
GARFIELD COUNTY	94,620	0.2184165	18,221	145,856	(83,218)	8,790	18,905	11,524
GARLAND CITY	13,762	0.0317685	2,650	21,215	(12,104)	1,278	2,750	1,676
GRAND COUNTY	161,962	0.3738644	31,189	249,662	(142,445)	15,045	32,360	19,725
GRANTSVILLE CITY	90,587	0.2091059	17,445	139,639	(79,671)	8,415	18,099	11,032
GUNNISON VALLEY POLICE DEPT	8,711	0.0201089	1,678	13,428	(7,662)	809	1,741	1,061
HEBER CITY	132,047	0.3048087	25,428	203,548	(116,134)	12,266	26,383	16,082
HERRIMAN CITY	145,056	0.3348391	27,934	223,602	(127,576)	13,475	28,982	17,666
HURRICANE CITY	81,758	0.1887244	15,744	126,028	(71,905)	7,595	16,335	9,957
HURRICANE VALLEY FIRE SSD	368,088	0.8496741	70,884	567,403	(323,731)	34,193	73,545	44,829
IRON COUNTY	358,075	0.8265590	68,955	551,967	(314,924)	33,263	71,544	43,609
IVINS CITY	69,518	0.1604719	13,387	107,161	(61,141)	6,458	13,890	8,466
JUAB COUNTY	113,293	0.2615187	21,817	174,639	(99,640)	10,524	22,636	13,798
KANE COUNTY	126,268	0.2914697	24,316	194,640	(111,052)	11,730	25,229	15,378

Utah Retirement Systems

Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions		
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
31,791	238,280	31,814	—	9,609	10,957	52,380	415,588	1,725	—	417,313
11,209	104,885	14,433	—	4,359	5,576	24,368	188,535	496	—	189,031
810	4,270	533	—	161	816	1,510	6,963	7	—	6,970
1,441	9,489	1,240	—	374	1,167	2,781	16,196	21	—	16,217
14,017	128,191	17,591	—	5,313	9,406	32,310	229,790	402	—	230,192
12,889	93,530	12,425	—	3,753	6,951	23,129	162,303	432	—	162,735
29,749	255,828	34,832	—	10,521	13,571	58,924	455,012	1,497	—	456,509
5,221	61,589	8,685	—	2,623	5,097	16,405	113,450	33	—	113,483
4,497	101,311	14,916	—	4,505	6,139	25,560	194,853	(126)	—	194,727
13,351	50,868	5,780	—	1,746	3,106	10,632	75,507	743	—	76,250
3,322	23,100	3,047	—	920	1,491	5,458	39,805	125	—	39,930
5,334	59,548	8,353	—	2,523	3,681	14,557	109,112	117	—	109,229
13,027	167,526	23,804	—	7,190	16,243	47,237	310,950	(230)	—	310,720
3,316	15,663	1,902	—	575	1,678	4,155	24,851	137	—	24,988
1,281	10,834	1,472	—	445	1,751	3,668	19,225	(39)	—	19,186
5,922	39,213	5,129	—	1,549	874	7,552	67,001	355	—	67,356
2,452	28,443	4,005	—	1,210	10,108	15,323	52,312	(532)	—	51,780
1,519	11,659	1,562	—	472	1,987	4,021	20,408	(18)	—	20,390
3,731	39,632	5,531	—	1,671	2,545	9,747	72,256	105	—	72,361
27,882	324,731	45,736	—	13,814	17,147	76,697	597,449	869	—	598,318
6,684	50,034	6,679	—	2,017	6,567	15,263	87,247	2	—	87,249
982	36,299	5,441	—	1,644	2,950	10,035	71,080	(149)	—	70,931
22,956	157,543	20,736	—	6,263	9,214	36,213	270,874	1,036	—	271,910
36,480	349,664	48,252	—	14,574	20,322	83,148	630,324	1,206	—	631,530
14,560	219,739	31,612	—	9,548	17,563	58,723	412,951	(235)	—	412,716
39,428	375,698	51,809	—	15,649	11,752	79,210	676,789	2,178	—	678,967
29,613	141,776	17,281	—	5,220	433	22,934	225,741	2,056	—	227,797
178	5,878	878	—	265	2,317	3,460	11,472	(158)	—	11,314
38,212	475,946	67,442	—	20,371	17,655	105,468	880,998	1,753	—	882,751
8,935	88,416	12,246	—	3,699	4,118	20,063	159,966	364	—	160,330
10,535	78,292	10,439	—	3,153	4,820	18,412	136,371	491	—	136,862
5,499	66,351	9,375	—	2,832	8,546	20,753	122,472	(158)	—	122,314
5,582	7,799	342	—	103	2,612	3,057	4,461	230	—	4,691
177	3,081	447	—	135	—	582	5,845	12	—	5,857
44,349	326,090	43,408	—	13,111	39,723	96,242	567,044	768	—	567,812
19,009	91,119	11,110	—	3,356	5,009	19,475	145,131	1,198	—	146,329
1,013	5,622	710	—	214	2,738	3,662	9,276	(127)	—	9,149
5,874	69,765	9,844	—	2,973	4,503	17,320	128,590	105	—	128,695
1,229	15,989	2,274	—	687	2,780	5,741	29,706	(116)	—	29,590
2,786	9,786	1,078	—	326	532	1,936	14,088	179	—	14,267
150	2,618	380	—	115	—	495	4,967	11	—	4,978
4,438	80,810	11,767	—	3,554	2,574	17,895	153,709	176	—	153,885
11,545	50,764	6,042	—	1,825	3,316	11,183	78,933	648	—	79,581
882	6,586	879	—	265	719	1,863	11,481	8	—	11,489
7,877	75,007	10,343	—	3,124	8,239	21,706	135,110	20	—	135,130
6,344	43,890	5,785	—	1,747	5,785	13,317	75,568	66	—	75,634
529	4,140	556	—	168	830	1,554	7,267	(25)	—	7,242
9,701	64,432	8,432	—	2,547	5,114	16,093	110,154	405	—	110,559
4,460	64,583	9,263	—	2,798	3,937	15,998	121,006	18	—	121,024
1,319	35,206	5,221	—	1,577	4,282	11,080	68,203	(193)	—	68,010
6,283	158,850	23,506	—	7,100	7,036	37,642	307,061	(113)	—	306,948
15,901	164,317	22,867	—	6,907	5,860	35,634	298,708	850	—	299,558
1,067	29,881	4,439	—	1,341	4,098	9,878	57,992	(201)	—	57,791
8,962	55,920	7,235	—	2,185	5,884	15,304	94,509	320	—	94,829
6,690	59,027	8,063	—	2,436	2,594	13,093	105,333	320	—	105,653

Tier 2 Public Safety and Firefighter Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
KAYSVILLE CITY	\$ 248,576	0.5737985%	\$ 47,869	383,176	(218,621)	23,091	49,666	30,274
LAVERKIN CITY	5,872	0.0135537	1,131	9,051	(5,164)	545	1,173	715
LAYTON CITY	742,937	1.7149524	143,069	1,145,226	(653,407)	69,014	148,440	90,481
LEHI CITY	610,507	1.4092590	117,567	941,087	(536,936)	56,713	121,980	74,352
LINDON CITY	44,475	0.1026644	8,565	68,558	(39,116)	4,132	8,886	5,417
LOGAN CITY	438,870	1.0130629	84,514	676,512	(385,983)	40,768	87,687	53,449
LONE PEAK PS DISTRICT	142,518	0.3289809	27,445	219,690	(125,344)	13,239	28,475	17,357
MAPLETON CITY	76,802	0.1772847	14,790	118,389	(67,547)	7,134	15,345	9,354
MILLARD COUNTY	198,571	0.4583704	38,239	306,095	(174,642)	18,446	39,675	24,184
MOAB VALLEY FIRE PROTECTION	28,409	0.0655768	5,471	43,791	(24,985)	2,639	5,676	3,460
MORGAN COUNTY	25,754	0.0594498	4,960	39,700	(22,651)	2,392	5,146	3,137
MOUNT PLEASANT CITY	7,815	0.0180402	1,505	12,047	(6,873)	726	1,561	952
MURRAY CITY	570,809	1.3176228	109,922	879,894	(502,022)	53,025	114,049	69,518
N TOOEELE FIRE PROTECTION SD	57,613	0.1329894	11,095	88,809	(50,670)	5,352	11,511	7,017
NEPHI CITY	47,313	0.1092148	9,111	72,932	(41,611)	4,395	9,453	5,762
NORTH DAVIS FIRE DISTRICT	126,580	0.2921894	24,376	195,121	(111,326)	11,759	25,291	15,416
NORTH FORK SSD	13,739	0.0317136	2,646	21,178	(12,083)	1,276	2,745	1,673
NORTH OGDEN CITY	117,982	0.2723437	22,720	181,868	(103,765)	10,960	23,573	14,369
NORTH PARK POLICE AGENCY	75,813	0.1750030	14,600	116,865	(66,677)	7,043	15,148	9,233
NORTH VIEW FIRE DISTRICT	145,070	0.3348708	27,936	223,623	(127,588)	13,476	28,985	17,668
OGDEN CITY CORP	1,212,480	2.7988202	233,490	1,869,020	(1,066,367)	112,632	242,255	147,666
PARK CITY	54,783	0.1264571	10,550	84,447	(48,181)	5,089	10,946	6,672
PARK CITY FIRE SERVICE	233,546	0.5391049	44,975	360,008	(205,402)	21,695	46,663	28,443
PAROWAN CITY	17,706	0.0408724	3,410	27,294	(15,573)	1,645	3,538	2,156
PAYSON CITY	84,407	0.1948398	16,254	130,112	(74,235)	7,841	16,865	10,280
PERRY CITY	17,940	0.0414117	3,455	27,654	(15,778)	1,667	3,584	2,185
PLEASANT GROVE CITY	175,106	0.4042039	33,720	269,923	(154,004)	16,266	34,986	21,326
PLEASANT VIEW CITY	38,307	0.0884256	7,377	59,050	(33,691)	3,558	7,654	4,665
PRICE CITY	65,071	0.1502055	12,531	100,306	(57,229)	6,045	13,001	7,925
PROVO CITY CORP	687,238	1.5863797	132,343	1,059,366	(604,420)	63,840	137,311	83,697
RICH COUNTY	20,230	0.0466989	3,896	31,185	(17,793)	1,879	4,042	2,464
RICHFIELD CITY	57,930	0.1337225	11,156	89,298	(50,949)	5,381	11,575	7,055
RIVERDALE CITY	104,902	0.2421497	20,201	161,705	(92,260)	9,745	20,960	12,776
ROOSEVELT CITY	35,216	0.0812901	6,782	54,285	(30,972)	3,271	7,036	4,289
ROY CITY	363,425	0.8389090	69,985	560,214	(319,629)	33,760	72,613	44,261
SALEM CITY	35,262	0.0813970	6,790	54,356	(31,013)	3,276	7,045	4,295
SALINA CITY	1,662	0.0038365	320	2,562	(1,462)	154	332	202
SALT LAKE CITY CORP	2,681,145	6.1890016	516,314	4,132,945	(2,358,046)	249,063	535,697	326,531
SALT LAKE COUNTY	2,575,098	5.9442089	495,892	3,969,475	(2,264,779)	239,212	514,509	313,616
SAN JUAN COUNTY	104,365	0.2409091	20,098	160,876	(91,788)	9,695	20,852	12,710
SANDY CITY	842,213	1.9441173	162,187	1,298,260	(740,720)	78,237	168,276	102,572
SANPETE COUNTY	108,080	0.2494856	20,813	166,604	(95,055)	10,040	21,595	13,163
SANTAQUIN CITY	53,615	0.1237613	10,325	82,646	(47,154)	4,981	10,712	6,530
SEVIER COUNTY	133,659	0.3085300	25,739	206,033	(117,552)	12,416	26,705	16,278
SMITHFIELD CITY CORP	62,371	0.1439745	12,011	96,145	(54,855)	5,794	12,462	7,596
SO DAVIS METRO FIRE AGENCY	359,194	0.8291427	69,171	553,692	(315,908)	33,367	71,767	43,746
SOUTH OGDEN CITY	148,678	0.3431992	28,631	229,185	(130,761)	13,811	29,706	18,107
SOUTHERN UTAH UNIVERSITY	25,231	0.0582422	4,859	38,893	(22,191)	2,344	5,041	3,073
SPANISH FORK CITY	213,178	0.4920880	41,052	328,611	(187,488)	19,803	42,593	25,963
SPRINGVILLE CITY	189,051	0.4363942	36,406	291,419	(166,269)	17,562	37,773	23,024
STATE OF UTAH	8,719,772	20.1282233	1,679,182	13,441,398	(7,668,968)	810,018	1,742,222	1,061,959
SUMMIT COUNTY	303,432	0.7004256	58,433	467,736	(266,866)	28,187	60,626	36,954
SUNSET CITY	25,301	0.0584038	4,872	39,001	(22,252)	2,350	5,055	3,081
SYRACUSE CITY CORP	196,235	0.4529778	37,789	302,493	(172,587)	18,229	39,208	23,899
TOOELE CITY	256,735	0.5926319	49,440	395,753	(225,796)	23,849	51,296	31,267
TOOELE COUNTY	242,086	0.5588173	46,619	373,172	(212,913)	22,488	48,369	29,483
TOWN OF APPLE VALLEY	1,971	0.0045490	379	3,038	(1,733)	183	394	240
TOWN OF BRIAN HEAD	17,571	0.0405593	3,384	27,085	(15,453)	1,632	3,511	2,140
TOWN OF MANTUA	6,086	0.0140483	1,172	9,381	(5,352)	565	1,216	741
TREMONTON CITY	81,433	0.1879756	15,682	125,528	(71,620)	7,565	16,270	9,918

Utah Retirement Systems

Deferred Outflows of Resources					Deferred Inflows of Resources			Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions		
13,495	116,526	15,874	—	4,795	7,340	28,009	207,363	449	—	207,812	
826	3,259	375	—	113	345	833	4,898	35	—	4,933	
30,554	338,489	47,444	—	14,330	18,234	80,008	619,761	1,001	—	620,762	
15,309	268,354	38,987	—	11,776	17,493	68,256	509,288	(109)	—	509,179	
1,783	20,218	2,840	—	858	2,683	6,381	37,102	(72)	—	37,030	
18,410	200,314	28,026	—	8,465	9,837	46,328	366,108	780	—	366,888	
10,603	69,674	9,101	—	2,749	7,082	18,932	118,889	345	—	119,234	
4,968	36,801	4,905	—	1,481	2,085	8,471	64,068	236	—	64,304	
10,430	92,735	12,681	—	3,830	7,377	23,888	165,649	295	—	165,944	
2,471	14,246	1,814	—	548	1,057	3,419	23,699	105	—	23,804	
3,269	13,944	1,645	—	497	3,783	5,925	21,484	(28)	—	21,456	
2,122	5,361	499	—	151	334	984	6,519	126	—	6,645	
25,974	262,566	36,452	—	11,010	16,614	64,076	476,172	947	—	477,119	
4,681	28,561	3,679	—	1,111	458	5,248	48,061	334	—	48,395	
3,906	23,516	3,021	—	913	1,398	5,332	39,469	195	—	39,664	
3,941	56,407	8,083	—	2,442	2,919	13,444	105,593	91	—	105,684	
1,096	6,790	877	—	265	4	1,146	11,461	79	—	11,540	
7,038	55,940	7,534	—	2,276	2,931	12,741	98,421	346	—	98,767	
8,534	39,958	4,841	—	1,462	2,986	9,289	63,244	386	—	63,630	
11,219	71,348	9,264	—	2,798	2,911	14,973	121,018	652	—	121,670	
38,513	541,066	77,429	—	23,387	21,187	122,003	1,011,457	1,627	—	1,013,084	
9,940	32,647	3,498	—	1,057	2,089	6,644	45,700	672	—	46,372	
17,559	114,360	14,914	—	4,505	14,113	33,532	194,825	450	—	195,275	
1,773	9,112	1,131	—	342	993	2,466	14,771	70	—	14,841	
4,421	39,407	5,390	—	1,628	4,324	11,342	70,413	25	—	70,438	
933	8,369	1,146	—	346	1,867	3,359	14,966	(60)	—	14,906	
7,702	80,280	11,182	—	3,378	7,896	22,456	146,074	(35)	—	146,039	
2,290	18,167	2,446	—	739	1,899	5,084	31,956	27	—	31,983	
4,537	31,508	4,155	—	1,255	1,744	7,154	54,282	206	—	54,488	
28,739	313,587	43,887	—	13,256	16,553	73,696	573,297	1,036	—	574,333	
2,885	11,270	1,292	—	390	947	2,629	16,876	155	—	17,031	
4,423	28,434	3,699	—	1,117	1,624	6,440	48,326	201	—	48,527	
1,355	44,836	6,699	—	2,023	4,144	12,866	87,510	(206)	—	87,304	
2,707	17,303	2,249	—	679	2,660	5,588	29,377	30	—	29,407	
26,145	176,779	23,208	—	7,010	8,965	39,183	303,171	1,388	—	304,559	
4,561	19,177	2,252	—	680	1,426	4,358	29,416	241	—	29,657	
853	1,541	106	—	32	389	527	1,386	32	—	1,418	
103,238	1,214,529	171,218	—	51,715	47,123	270,056	2,236,625	4,576	—	2,241,201	
218,067	1,285,404	164,445	—	49,670	74,328	288,443	2,148,160	11,959	—	2,160,119	
8,333	51,590	6,665	—	2,013	6,516	15,194	87,061	178	—	87,239	
32,416	381,501	53,784	—	16,245	20,708	90,737	702,579	1,033	—	703,612	
2,709	47,507	6,902	—	2,085	4,309	13,296	90,161	(89)	—	90,072	
3,511	25,734	3,424	—	1,034	2,226	6,684	44,726	84	—	44,810	
7,006	62,405	8,535	—	2,578	3,899	15,012	111,499	297	—	111,796	
1,312	27,164	3,983	—	1,203	6,551	11,737	52,031	(395)	—	51,636	
14,757	163,637	22,938	—	6,928	17,333	47,199	299,641	(30)	—	299,611	
9,699	71,323	9,495	—	2,868	3,460	15,823	124,028	486	—	124,514	
211	10,669	1,611	—	487	1,752	3,850	21,048	(117)	—	20,931	
6,691	95,050	13,614	—	4,112	3,714	21,440	177,834	220	—	178,054	
10,340	88,699	12,073	—	3,647	5,549	21,269	157,707	470	—	158,177	
436,480	4,050,679	556,847	—	168,193	187,621	912,661	7,274,079	21,723	—	7,295,802	
11,268	137,035	19,377	—	5,853	12,742	37,972	253,125	(95)	—	253,030	
5,203	15,689	1,616	—	488	598	2,702	21,106	350	—	21,456	
11,223	92,559	12,532	—	3,785	1,394	17,711	163,700	786	—	164,486	
8,738	115,150	16,395	—	4,952	8,202	29,549	214,169	115	—	214,284	
17,454	117,794	15,460	—	4,669	8,077	28,206	201,949	675	—	202,624	
50	867	126	—	38	—	164	1,644	3	—	1,647	
1,006	8,289	1,122	—	339	675	2,136	14,658	20	—	14,678	
886	3,408	389	—	117	749	1,255	5,077	11	—	5,088	
8,943	42,696	5,200	—	1,571	1,339	8,110	67,932	552	—	68,484	

Tier 2 Public Safety and Firefighter Contributory Retirement System
Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Contributions	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
UINTAH COUNTY	\$ 295,484	0.6820773%	\$ 56,902	455,483	(259,876)	27,449	59,038	35,986
UINTAH FIRE SUPPRESSION SSD	5,786	0.0133565	1,114	8,919	(5,089)	538	1,156	705
UNIFIED FIRE AUTHORITY	1,093,488	2.5241441	210,575	1,685,595	(961,714)	101,579	218,480	133,174
UNIFIED POLICE DEPARTMENT	920,635	2.1251415	177,289	1,419,145	(809,692)	85,522	183,944	112,122
UNIVERSITY OF UTAH	125,910	0.2906442	24,247	194,089	(110,737)	11,696	25,157	15,334
UTAH COUNTY	966,983	2.2321271	186,214	1,490,589	(850,454)	89,827	193,205	117,767
UTAH STATE UNIVERSITY	37,853	0.0873784	7,289	58,350	(33,292)	3,516	7,563	4,610
UTAH TECH UNIVERSITY	28,887	0.0666804	5,563	44,528	(25,406)	2,683	5,772	3,518
VERNAL CITY	83,724	0.1932626	16,123	129,059	(73,634)	7,777	16,728	10,197
WASATCH COUNTY	242,690	0.5602117	46,735	374,103	(213,444)	22,544	48,490	29,557
WASATCH COUNTY FIRE DISTRICT	159,560	0.3683191	30,727	245,959	(140,332)	14,822	31,880	19,433
WASHINGTON CITY	270,804	0.6251078	52,149	417,440	(238,170)	25,156	54,107	32,981
WASHINGTON COUNTY	489,774	1.1305666	94,317	754,980	(430,753)	45,497	97,858	59,649
WAYNE COUNTY	3,333	0.0076948	642	5,139	(2,932)	310	666	406
WEBER AREA DISPATCH 911	228,627	0.5277497	44,027	352,425	(201,076)	21,238	45,680	27,844
WEBER COUNTY CORP	855,832	1.9755544	164,809	1,319,253	(752,698)	79,502	170,997	104,230
WEBER FIRE DISTRICT	264,200	0.6098642	50,878	407,260	(232,362)	24,543	52,788	32,176
WELLINGTON CITY	1,253	0.0028916	241	1,931	(1,102)	116	250	153
WEST BOUNTIFUL CITY	70,325	0.1623339	13,543	108,405	(61,850)	6,533	14,051	8,565
WEST VALLEY CITY	1,565,275	3.6131920	301,428	2,412,849	(1,376,648)	145,405	312,744	190,632
WILLARD CITY CORP	12,226	0.0282217	2,354	18,846	(10,753)	1,136	2,443	1,489
WOODS CROSS CITY	62,122	0.1433998	11,963	95,761	(54,636)	5,771	12,412	7,566
	\$ 43,321,124	100.0000000%	\$ 8,342,440	66,778,868	(38,100,595)	4,024,280	8,655,627	5,275,996
Units without a proportionate share for 2022 but had a proportionate share in a prior year								
BLUFFDALE CITY	\$ —	0.0000000%	\$ —	—	—	—	—	—
CITY OF MONTICELLO	—	0.0000000	—	—	—	—	—	—
NORTH LOGAN CITY	—	0.0000000	—	—	—	—	—	—
TOWN OF SPRINGDALE	—	0.0000000	—	—	—	—	—	—
GARDEN CITY FIRE DISTRICT	—	0.0000000	—	—	—	—	—	—
STOCKTON TOWN	—	0.0000000	—	—	—	—	—	—
GRAND TOTAL	\$ 43,321,124	100.0000000%	\$ 8,342,440	66,778,868	(38,100,595)	4,024,280	8,655,627	5,275,996

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
20,598	143,071	18,870	—	5,699	15,958	40,527	246,494	585	—	247,079
146	2,545	370	—	112	—	482	4,827	10	—	4,837
86,157	539,390	69,830	—	21,092	26,035	116,957	912,193	4,677	—	916,870
19,622	401,210	58,792	—	17,758	21,333	97,883	767,998	45	—	768,043
4,360	56,547	8,041	—	2,429	11,367	21,837	105,035	(447)	—	104,588
21,361	422,160	61,751	—	18,652	17,996	98,399	806,662	314	—	806,976
1,667	17,356	2,417	—	730	1,541	4,688	31,577	3	—	31,580
2,452	14,425	1,845	—	557	1,231	3,633	24,097	100	—	24,197
3,708	38,410	5,347	—	1,615	2,033	8,995	69,843	106	—	69,949
11,705	112,296	15,498	—	4,681	5,281	25,460	202,453	494	—	202,947
10,015	76,150	10,189	—	3,078	5,153	18,420	133,106	332	—	133,438
7,335	119,579	17,293	—	5,223	5,187	27,703	225,906	252	—	226,158
23,142	226,146	31,277	—	9,447	14,005	54,729	408,572	765	—	409,337
1,087	2,469	213	—	64	589	866	2,781	37	—	2,818
45,440	140,202	14,600	—	4,410	5,377	24,387	190,722	2,823	—	193,545
37,843	392,572	54,653	—	16,508	20,099	91,260	713,940	1,429	—	715,369
12,643	122,150	16,872	—	5,096	24,845	46,813	220,397	(782)	—	219,615
930	1,449	80	—	24	410	514	1,045	36	—	1,081
5,754	34,903	4,491	—	1,356	2,846	8,693	58,665	218	—	58,883
37,953	686,734	99,958	—	30,192	44,592	174,742	1,305,761	(239)	—	1,305,522
1,859	6,927	781	—	236	159	1,176	10,199	120	—	10,319
3,782	29,531	3,967	—	1,198	3,037	8,202	51,823	46	—	51,869
2,192,055	20,147,958	2,766,482	—	835,603	1,193,347	4,795,432	36,138,698	84,855	—	36,223,553
849	849	—	—	—	4,213	4,213	—	(248)	—	(248)
1,369	1,369	—	—	—	3,258	3,258	—	(125)	—	(125)
1,150	1,150	—	—	—	2,947	2,947	—	(114)	—	(114)
476	476	—	—	—	—	—	—	42	—	42
776	776	—	—	—	—	—	—	74	—	74
853	853	—	—	—	428	428	—	33	—	33
2,197,528	20,153,431	2,766,482	—	835,603	1,204,192	4,806,277	36,138,698	84,517	—	36,223,215

Utah Retirement Systems

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Contributions	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Increase (7.85)	Net Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
NONCONTRIBUTORY RETIREMENT SYSTEM	\$ 978,143,022	2,328,799,442	6,742,744,974	(1,363,844,097)	446,112,112	518,050,745	152,007,765
CONTRIBUTORY RETIREMENT SYSTEM	3,725,703	22,429,530	134,674,377	(73,669,977)	—	7,375,108	—
PUBLIC SAFETY RETIREMENT SYSTEM	169877592	346,264,663	1,049,306,579	(228,353,254)	23,976,071	77,888,918	9,782,782
FIREFIGHTERS RETIREMENT SYSTEM	6,988,882	(151,839,779)	59,814,429	(325,193,189)	10,644,528	28,419,238	11,934,115
JUDGES RETIREMENT SYSTEM	9,378,006	35,268,363	68,697,896	6,908,639	7,013,069	4,293,863	2,437,427
UTAH GOVERNORS AND LEGISLATORS RETIREMENT PLAN	422,455	1,043,978	2,265,342	(724)	—	123,331	—
TIER 2 PUBLIC EMPLOYEES CONTRIBUTORY RETIREMENT SYSTEM	211,419,012	108,889,373	475,786,866	(173,758,628)	36,778,811	43,900,687	35,350,669
TIER 2 PUBLIC SAFETY AND FIREFIGHTER CONTRIBUTORY RETIREMENT SYSTEM	43,321,124	8,342,440	66,778,868	(38,100,595)	4,024,280	8,655,627	5,275,996
GRAND TOTAL	\$1,423,275,795	2,699,198,010	8,600,069,331	(2,196,011,825)	528,548,871	688,707,517	216,788,754

Columns may not add to total due to rounding.

Utah Retirement Systems

Deferred Outflows of Resources			Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	
32,178,148	1,148,348,770	1,925,565	—	683,914	28,033,685	30,643,164	643,586,528	93,144	—	643,679,672	
—	7,375,108	—	—	—	—	—	45,896,040	50,224	—	45,946,264	
3,828,108	115,475,879	1,822,551	—	378,732	3,093,269	5,294,552	103,400,788	1,056,636	—	104,457,424	
4,215,629	55,213,510	294,254	—	—	3,866,107	4,160,361	(6,376,506)	131,227	(22,738,231)	(28,983,510)	
—	13,744,359	—	—	—	—	—	9,691,343	—	(1,335,491)	8,355,852	
—	123,331	—	—	—	—	—	46,416	—	—	46,416	
20,866,883	136,897,050	4,320,264	—	277,001	5,564,958	10,162,223	206,554,938	2,322,301	—	208,877,239	
2,197,528	20,153,431	2,766,482	—	835,603	1,204,192	4,806,277	36,138,698	84,517	—	36,223,215	
63,286,295	1,497,331,437	11,129,116	—	2,175,250	41,762,211	55,066,577	1,038,938,245	3,738,050	(24,073,722)	1,018,602,573	

Notes to the Public Safety System Schedule of Changes in Fiduciary Net Position – Pension Trust Fund by Division and Schedules of Employer Allocations and Pension Amounts Financial Statements

December 31, 2022



Note 1 Description of Systems

A brief description of the Utah Retirement Systems (Systems) follows. For a more complete description of plan provisions, membership and benefit statistics, see the Systems Highlights on pages 14 through 30 and Summaries of Plan Provisions on pages [220](#) through 231

A) General Information and Reporting Entity

General — The Utah Retirement Systems are comprised of the following pension trust funds:

- i) the **Public Employees Noncontributory Retirement System** (Noncontributory System); the **Public Employees Contributory Retirement System** (Contributory System); and the

- ii) the **Firefighters Retirement System** are multiple-employer, cost-sharing, public employee retirement systems;
- iii) the **Public Safety Retirement System** is a mixed agent and cost-sharing, multiple-employer retirement system;
- iv) the **Judges Retirement System** and the **Utah Governors and Legislators Retirement Plan** are single-employer service-employee retirement systems; and
- v) the **Tier 2 Public Employees Contributory Retirement System** and the **Tier 2 Public Safety and Firefighter Contributory Retirement System** are multiple-employer, cost-sharing public employee retirement systems.

These Systems cover employees of the State of Utah and participating local government and public education entities.

Notes to Schedules of Employer Allocations and Pension Amounts *(Continued)*

Summary of Benefits by System

	Noncontributory System	Contributory System	Public Safety System	Fire-fighters System	Judges System	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System
Final average salary is	Highest 3 years	Highest 5 years	Highest 3 years	Highest 3 years	Highest 2 years	Highest 5 years	Highest 5 years
Years of service required and/ or age eligible for benefit	30 years any age 25 years any age* 20 years age 60* 10 years age 62* 4 years age 65	30 years any age 20 years age 60* 10 years age 62* 4 years age 65	20 years any age 10 years age 60 4 years age 65	25 years any age 20 years age 55* 10 years age 62 6 years age 70	35 years any age 20 years age 60* 10 years age 62* 4 years age 65	25 years any age 20 years age 60* 10 years age 62*	
Benefit percent per year of service**	2.0% per year all years	1.25% per year to June 1975; 2.0% per year July 1975 to present	2.5% per year up to 20 years; 2.0% per year over 20 years	5.0% first 10 years; 2.25% second 10 years; 1.0% over 20 years	1.5% per year all years	1.5% per year to June 2020; 2.0% per year July 2020 to present	

Note: The Utah Governors and Legislators Retirement Plan benefits are explained in the second paragraph of section B) below.

**With actuarial reductions.*

***For members and retirees in the systems, prior to January 1, 1989, there may be a 3% benefit enhancement.*

Reporting Entity — These Schedules of Employer Allocations and Pension amounts cover all of the foregoing retirement systems administered by the Utah State Retirement Board (Board), the sole governing body for these Systems.

The Systems are established and governed by the respective sections of Title 49 of the Utah Code Annotated 1953, as amended. The Systems' defined benefit plans are amended statutorily by the State Legislature. The Utah State Retirement Office Act in Title 49 provides for the administration of the Systems under the direction of the Board, whose members are appointed by the Governor. The Systems are fiduciary funds defined as pension (and other employee benefit) trust funds. Utah Retirement Systems is a component unit of the State of Utah.

B) Retirement and Death Benefits

Retirement Systems' benefits are specified by the statute in Note 1(A) and are defined benefit plans wherein benefits are based on age and/or years of service and highest average salary. Various plan options within the Systems may be selected by retiring members. Some options require actuarial reductions based on attained age, age of spouse, and similar actuarial factors. A brief summary of eligibility and benefits of the various Systems is shown in the table above.

The Utah Governors and Legislators Retirement Plan provides the following benefits. Former governors at age 65 receive \$1,480 per month per term. Legislators receive a benefit at age 65 with four or more years of service at the rate of \$32.00 per month per year of service. Retirement at age 62 with 10 or more years of service will receive an actuarial reduction. Both the governors' and legislators' benefits are adjusted based on the CPI limited to 4 of the base benefit per year.

Death benefits for active and retired employees are in accordance with retirement statutes. Upon termination of employment, members of the Systems may leave their retirement account intact for future benefits based on vesting qualification or withdraw the accumulated funds in their individual member account and forfeit service credits and rights to future benefits upon which the contributions were based.

C) Contributions

As a condition of participation in the Defined Benefit Systems, employers and/or employees are required to contribute certain percentages of salaries and wages as authorized by statute and specified by the Board.

Employee contributions may be paid in part or in whole by the employer. Contributions in some Systems are also augmented by fees or insurance premium taxes.

Notes to Schedules of Employer Allocations and Pension Amounts *(Continued)*

Contribution Rates

December 31, 2022

System	Contribution Rates as a Percent of Covered Payroll		
	Member	Employer	Other
Noncontributory Retirement System	—	17.97-22.19 %	—
Contributory Retirement System	6.00	13.96-17.70	—
Public Safety Retirement System: Noncontributory	—	32.28-50.38	—
Contributory	10.50-12.29	22.79-27.98	—
Firefighters Retirement System: Division A	15.05	3.61	11.06 %
Division B	16.71	6.24	11.06
Judges Retirement System Noncontributory	—	44.76	7.15
Governors and Legislators Retirement Plan	—	\$ 359,939	—
Tier 2 Public Employees Contributory Retirement System	—	16.19-20.02 %	—
Tier 2 Public Safety and Firefighter Contributory Retirement System	2.59	14.08-40.97	—

Employee (member) contributions are placed into member accounts, and in Systems where it is authorized, interest is credited to member accounts. Upon termination of employment, a member may withdraw his or her account balance including interest that has been credited. Upon withdrawal a member forfeits the service credit that corresponds to the member contributions withdrawn.

The noncontributory retirement systems have no required member contributions flowing into them. However, where members had a balance transferred in or purchased service credit in the system, these balances and on-going interest, where authorized, are credited to individual member accounts that may be withdrawn upon the termination of employment.

D) Covered Employees

The **Public Employees Noncontributory Retirement System** (Noncontributory System) was established on July 1, 1986, and is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. All eligible employees of the State and School entities hired subsequent to that date are automatically members of the Noncontributory System until July 1, 2011, when Tier 2 came into effect. Local government entities had the option of adopting the new System or remaining with the Contributory System. All Contributory System members whose employers adopted the Noncontributory System were given the opportunity to transfer to the new System during limited window periods. All eligible new hires subsequent to adoption of the noncontributory plans are automatically members of that plan.

The **Public Employees Contributory Retirement System** (Contributory System) includes eligible public employees of the State of Utah and its political subdivisions including public education employees of those entities covered by the System. The System is comprised of two divisions, the State and School division and the Local Government division. These divisions are not separate plans. Members of this System are those who did not elect to transfer to the Public Employees Noncontributory Retirement System during the period when they were eligible to transfer or whose employers are not participants in the Noncontributory System.

The **Public Safety Retirement System** includes eligible State and local government employees directly involved in law enforcement (e.g., game wardens, prison guards, police officers, and highway patrol officers) and is comprised of eight divisions, the State of Utah, Division A with Social Security, Salt Lake City, Ogden, Provo, Logan, Bountiful, and Division B without Social Security. These divisions are not separate plans. The Public Safety System consists of both contributory and noncontributory divisions. The noncontributory divisions were authorized by the Legislature effective July 1, 1989.

Notes to Schedules of Employer Allocations and Pension Amounts (Continued)



Participating Membership by System

	Noncontributory System	Contributory System	Public Safety Systems	Firefighters System	Judges System	Utah Governors and Legislators Retirement	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighter System
Number of participating:								
Employers	482	159	135	72	1	1	493	155
Members:								
Active	45,437	253	3,918	1,289	119	44	43,105	5,326
Terminated vested	47,415	908	4,673	467	10	70	7,173	530
Retirees and beneficiaries:								
Service benefits	59,343	3,007	6,255	1,392	135	173	445	5
Beneficiary benefits	5,923	487	891	259	29	64	12	2

The **Firefighters Retirement System** includes eligible State and local government employees directly involved in fire fighting and is comprised of two divisions, Division A with Social Security and Division B without Social Security. These divisions are not separate plans.

The **Judges Retirement System** includes justices and judges of the court as authorized by state statutes.

The **Utah Governors and Legislators Retirement Plan** includes only governors and legislators of the State.

The **Tier 2 Public Employees Contributory Retirement System** includes eligible public employees entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

The **Tier 2 Public Safety and Firefighter Contributory Retirement System** includes eligible public safety and firefighters entering into the Utah Retirement Systems on or after July 1, 2011, when Tier 2 came into effect.

As of December 31, 2022, participating members by System are included in the table above.

Notes to Schedules of Employer Allocations and Pension Amounts *(Continued)*



Note 2 Basis of Presentation

The Schedules of Employer Allocations and Pension Amounts for the Noncontributory Retirement System, Contributory Retirement System, Public Safety Retirement System, Firefighters Retirement System, Judges Retirement System, Utah Governors and Legislators Retirement Plan, Tier 2 Public Employees Contributory Retirement System and the Tier 2 Public Safety and Firefighter Retirement System present amounts that are considered elements of the financial statements of the Systems or of its participating employers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of the Systems or of its participating employers.

The amounts presented in the Schedules were prepared in accordance with accounting principles generally accepted in the United State of America. Such preparation requires management of the Systems to make a number of estimates and assumptions related to the reported amounts. Due to the inherent nature of these estimates, actual results could differ from those estimates. The following are the significant accounting policies followed by the Systems:

A) Allocation Percentage Methodology

Each employer's proportion is equal to the ratio of the employer's actual contributions to the Systems during the plan year over the total of all employer contributions to the Systems during the plan year. This allocation method is a reasonable representation of each employer's proportionate share of the projected long-term contribution effort to the System and satisfies applicable requirements within Governmental Accounting Standards Board Statement Number 68 (GASB No. 68). The change in proportion each year is reflected in deferred outflows and deferred inflows of resources.

B) Collective Net Pension Liability of Participating Employers and Actuarial Information

The Systems used updated procedures to roll forward the total pension liability from January 1, 2022, to December 31, 2022. The components of the current-year pension liability/(asset) of the employers as of December 31, 2022, were as shown in the schedule on page 355.

C) Actuarial Assumptions

Actuarial valuation of the ongoing Systems involve estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Notes to Schedules of Employer Allocations and Pension Amounts (Continued)

Net Pension Liability by Division

Year Ended December 31, 2022

System	(in thousands)					
	(1) Total Pension Liability	(2) Plan Fiduciary Net Position	(3) Employers Net Pension Liability/ (Asset)	(4) Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	(5) Projected Covered Employee Payroll	(6) Net Pension Liability/ (Asset) as a Percentage of Covered Employee Payroll
Noncontributory Retirement System						
Local Government	\$ 6,907,325	6,736,050	171,275	97.5%	\$ 775,035	22.1%
State and School	25,857,723	23,698,447	2,159,275	91.6	2,384,286	90.6
Higher Education	2,166,318	2,168,068	(1,751)	100.1	200,877	(0.9)
Total	34,931,365	32,602,566	2,328,799	93.3	3,360,197	69.3
Contributory Retirement System						
Local Government	455,903	445,618	10,285	97.7	11,477	89.6
State and School	627,180	614,111	13,069	97.9	7,816	167.2
Higher Education	155,721	156,645	(924)	100.6	3,567	(25.9)
Total	1,238,804	1,216,375	22,430	98.2	22,860	98.1
Public Safety Retirement System						
State of Utah	1,659,515	1,580,626	78,889	95.2	92,226	85.5
Other Division A (with Social Security)	2,023,757	1,894,449	129,307	93.6	125,569	103.0
Salt Lake City	449,924	387,641	62,283	86.2	25,994	239.6
Ogden	93,737	81,322	12,415	86.8	3,499	354.8
Provo	76,173	67,188	8,986	88.2	3,955	227.2
Logan	40,748	37,522	3,226	92.1	1,877	171.9
Bountiful	30,369	25,678	4,691	84.6	1,728	271.5
Other Division B (without Social Security)	741,214	694,746	46,468	93.7	59,091	78.6
Total	5,115,436	4,769,171	346,265	93.2	313,939	110.3
Firefighters Retirement System						
Division A (with Social Security)	309,734	335,704	(25,970)	108.4	33,301	(78.0)
Division B (without Social Security)	1,223,669	1,349,539	(125,869)	110.3	81,401	(154.6)
Total	1,533,403	1,685,243	(151,840)	109.9	114,702	(132.4)
Judges Retirement System	297,575	262,306	35,268	88.1	21,202	166.3
Governors and Legislators Retirement Plan	13,166	12,122	1,044	92.1	564	185.2
Tier 2 Public Employees Retirement System	1,412,218	1,303,329	108,889	92.3	2,099,223	5.2
Tier 2 Public Safety and Firefighter Retirement System	231,741	223,399	8,342	96.4	265,137	3.1
Grand Total	\$ 44,773,709	42,074,511	2,699,198	94.0%	\$ 6,197,823	43.6%

The last experience study was performed in 2020 for the period ending December 31, 2019 based upon actual plan experience. In accordance with board policy, the experience study reviews economic and demographic assumptions every three years. The economic assumptions were reviewed in connection with the 2021 valuation, and as a result, the board adopted the following change to the actuarial assumptions: a decrease in the investment return assumption from 6.95% to 6.85% (a 0.10% decrease in the

real rate of return assumption). The Schedule of Employers' Net Pension Liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The total pension liability as of December 31, 2022, is based on the results of an actuarial valuation date of January 1, 2022, and rolled-forward using accepted actuarial procedures.

Notes to Schedules of Employer Allocations and Pension Amounts (Continued)

Summary of Actuarial Assumptions

	Noncontributory	Contributory	Public Safety	Firefighters	Judges	Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter
Valuation date	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age
Amortization method	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll	Level Percent of Payroll
Amortization period	Open Group* 20-Year Open Period	Open Group* 20-Year Open Period	Open Group 20-Year Open Period	Open Group 20-Year Open Period	Open Group 20-Year Open Period	Closed Group 12-Year Closed Period	Open Group 20-Year Open Period	Open Group 20-Year Open Period
Actuarial assumptions: Investment rate of return	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%
Projected salary increases**	3.25-9.25%	3.25-9.25%	3.25-6.75%	3.25-8.50%	0.0325	None	3.25-9.25%	3.25-8.50%
Inflation rate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Post-retirement cost-of-living adjustment	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Mortality: (Non-Educators)	Male retirees: 110% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 110% of 2020 PR UTAH Retiree Mortality Table for females, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020.							
Mortality: (Educators)	Male retirees: 90% of 2020 PR UTAH Retiree Mortality Table for males, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020. Female retirees: 90% of 2020 PR UTAH Retiree Mortality Table for females, projected with 80% of the ultimate rates from the MP-2019 mortality improvement scale using a base year of 2020.							

Note: All post-retirement cost-of-living adjustments are noncompounding and are based on the original benefit except for Judges, which is a compounding benefit. The cost-of-living adjustments are also limited to the actual CPI increase for the year, although unused CPI increases not met may be carried forward to subsequent years.

*The amortization period for the Higher Education divisions (Noncontributory and Contributory) are closed 15-year periods.

**Composed of 2.50% inflation, plus 0.75% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service.

Target Allocations

Asset Class	Expected Return Arithmetic Basis		
	Target Asset Allocation	Real Return Arithmetic Basis	Long-term Expected Portfolio Real Rate of Return*
Equity securities	35%	6.58%	2.30%
Debt securities	20	1.08	0.22
Real assets	18	5.72	1.03
Private equity	12	9.80	1.18
Absolute return	15	2.91	0.44
Cash and cash equivalents	0	(0.11)	0.00
Total	100%		5.17%
Inflation			2.50
Expected arithmetic nominal return			7.67%

*The total URS Defined Benefit long-term expected rate of return is 6.85%, which is comprised of a 2.50% inflation assumption and a 4.35% net real rate of return.

A summary of the actuarial assumptions, as of the latest actuarial valuation, is as shown above.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Systems target asset allocation, as of December 31, 2022, are summarized at left.

Notes to Schedules of Employer Allocations and Pension Amounts (Continued)

Changes in Discount Rate

Year Ended December 31, 2022

System	Net Pension Liability/(Asset) 1% Decrease (5.85)%	Net Pension Liability/(Asset) Current Discount Rate (6.85)%	Net Pension Liability/(Asset) 1% Decrease (7.85)%
Noncontributory Retirement System			
Local Government	\$ 1,079,431,728	171,274,888	(587,537,947)
State and School	5,396,888,271	2,159,275,108	(549,880,189)
Higher Education	266,424,975	(1,750,554)	(226,425,961)
Total	6,742,744,974	2,328,799,442	(1,363,844,097)
Contributory Retirement System			
Local Government	52,762,504	10,284,742	(25,766,719)
State and School	69,024,845	13,068,776	(35,086,310)
Higher Education	12,887,028	(923,988)	(12,816,948)
Total	134,674,377	22,429,530	(73,669,977)
Public Safety Retirement System			
State of Utah	296,594,023	78,888,856	(100,105,522)
Other Division A (with Social Security)	416,435,442	129,307,482	(104,195,195)
Salt Lake City	122,001,965	62,282,792	13,241,318
Ogden	24,553,389	12,415,057	2,462,350
Provo	19,154,981	8,985,869	665,680
Logan	8,703,941	3,226,301	(1,238,683)
Bountiful	8,519,447	4,690,801	1,524,964
Other Division B (without Social Security)	153,343,391	46,467,505	(40,708,166)
Total	1,049,306,579	346,264,663	(228,353,254)
Firefighters Retirement System			
Division A (with Social Security)	20,698,928	(25,970,419)	(63,843,971)
Division B (without Social Security)	39,115,501	(125,869,360)	(261,349,218)
Total	59,814,429	(151,839,779)	(325,193,189)
Judges Retirement System			
Governors and Legislators Retirement Plan	2,265,342	1,043,978	(724)
Tier 2 Public Employees Contributory Retirement System	475,786,866	108,889,373	(173,758,628)
Tier 2 Public Safety and Firefighter Contributory Retirement System	66,778,868	8,342,440	(38,100,595)
Grand Total	\$ 8,600,069,331	2,699,198,010	(2,196,011,825)

D) Discount Rate

The discount rate used to measure the total pension liability was 6.85%. The projection of cash flows used to determine the discount rate assumed contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates under Utah State Code. Based on those assumptions, the Systems' fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term

expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

E) Sensitivity to the Discount Rate

The table above presents the current-period net pension liability/ (asset) of the employers calculated using the current-period discount rate assumption of 6.85%, as well as what the net pension liability/(asset) would be if it were calculated using a 1.00% point lower (5.85%) or a 1.00% point higher (7.85%) than the current assumption.

Notes to Schedules of Employer Allocations and Pension Amounts (Continued)



Note 3
Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred outflows of resources and deferred inflows of resources represent the inflows or outflows that have been deferred or delayed until a future period. What is being deferred is the recognition of those outflows and inflows as revenues and expenses.

A) Difference Between Expected and Actual Experience

The difference between expected and actual experience with regard to economic and demographic factors is amortized over the average remaining service lives of the members (active and inactive members). The first year of amortization is recognized as a pension expense with the remaining years shown as either a deferred inflow or deferred outflow of resources. The collective amounts of the difference between the expected and actual experience for the year ended December 31, 2022, are shown in the left table on page 359.

B) Changes in Assumptions

The changes in assumptions about future economic or demographic factors or other inputs is amortized over the average remaining service lives of the members (active and inactive members). The first year of amortization is recognized as a pension expense with the remaining years shown as either a deferred inflow or deferred outflow of resources.

Assumptions and Methods

Every three years in conjunction with the actuarial valuation the actuary performs an experience study. Based upon the 2020 experience study, the actuary recommended some changes in the actuarial assumptions that were adopted by the Board. Some of the changes were to decrease the payroll growth assumption from 3.00% to 2.90%, update post and pre-retirement mortality tables based on URS experience and modified retirement and termination rates by employee type and gender. The experience study also modified rates of salary increases for individuals which results in a slight decrease, but changes vary by employee type and there was no adjustment to wage inflation assumption.

C) Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments

The difference between the System’s expected rate of return of 6.85% and actual investment earnings on pension plan investments is amortized over a five-year closed period in accordance with GASB Statement No. 68. The first year of amortization is recognized as pension expense with the remaining years shown as either a deferred outflow or deferred inflow of resources. The collective net deferred outflow and inflows of the difference between expected and actual experience for the year ended December 31, 2022, is a deferred outflow of \$688,707,517 as illustrated in the left table on page 360.

Notes to Schedules of Employer Allocations and Pension Amounts (Continued)

Differences Between Expected and Actual Experience

December 31, 2022

System	Deferred Outflows	Deferred Inflows
Noncontributory Retirement System		
Local Government	\$ 58,093,898	—
State and School	375,872,293	—
Higher Education	12,145,921	1,925,565
Total	446,112,112	1,925,565
Contributory Retirement System		
Local Government	—	—
State and School	—	—
Higher Education	—	—
Total	—	—
Public Safety Retirement System		
State of Utah	5,096,499	—
Other Division A (with Social Security)	572,491	—
Salt Lake City	1,783,690	155,194
Ogden	306,301	—
Provo	180,830	1,093,885
Logan	—	187,540
Bountiful	—	385,932
Other Division B (without Social Security)	16,036,260	—
Total	23,976,071	1,822,551
Firefighters Retirement System		
Division A (with Social Security)	4,582,557	132,743
Division B (without Social Security)	6,061,971	161,511
Total	10,644,528	294,254
Judges Retirement System	7,013,069	—
Utah Governors and Legislators Retirement Plan	—	—
Tier 2 Public Employees Retirement System	36,778,811	4,320,264
Tier 2 Public Safety and Firefighter Retirement System	4,024,280	2,766,482
Grand Total	\$ 528,548,871	11,129,116

Changes in Assumptions

December 31, 2022

System	Deferred Outflows	Deferred Inflows
Noncontributory Retirement System		
Local Government	\$ 28,069,681	683,914
State and School	123,555,162	—
Higher Education	382,922	—
Total	152,007,765	683,914
Contributory Retirement System		
Local Government	—	—
State and School	—	—
Higher Education	—	—
Total	—	—
Public Safety Retirement System		
State of Utah	1,613,353	—
Other Division A (with Social Security)	3,468,099	—
Salt Lake City	1,047,161	—
Ogden	—	—
Provo	183,167	—
Logan	—	—
Bountiful	40,008	—
Other Division B (without Social Security)	3,430,994	378,732
Total	9,782,782	378,732
Firefighters Retirement System		
Division A (with Social Security)	3,227,990	—
Division B (without Social Security)	8,706,125	—
Total	11,934,115	—
Judges Retirement System	2,437,427	—
Utah Governors and Legislators Retirement Plan	—	—
Tier 2 Public Employees Retirement System	35,350,669	277,001
Tier 2 Public Safety and Firefighter Retirement System	5,275,996	835,603
Grand Total	\$ 216,788,754	2,175,250

Notes to Schedules of Employer Allocations and Pension Amounts (Continued)

Net Difference Between Projected and Actual Investment Earnings on Plan Investments

December 31, 2022

System	Deferred Outflows	Deferred Inflows
Noncontributory Retirement System		
Local Government	\$ 112,974,607	—
State and School	371,071,969	—
Higher Education	34,004,169	—
Total	518,050,745	—
Contributory Retirement System		
Local Government	3,066,098	—
State and School	2,616,249	—
Higher Education	1,692,761	—
Total	7,375,108	—
Public Safety Retirement System		
State of Utah	25,303,480	—
Other Division A (with Social Security)	29,971,497	—
Salt Lake City	6,281,381	—
Ogden	1,214,375	—
Provo	995,105	—
Logan	602,603	—
Bountiful	369,494	—
Other Division B (without Social Security)	13,150,983	—
Total	77,888,918	—
Firefighters Retirement System		
Division A (with Social Security)	6,948,211	—
Division B (without Social Security)	21,471,027	—
Total	28,419,238	—
Judges Retirement System		
Utah Governors and Legislators	123,331	—
Tier 2 Public Employees Retirement System		
Tier 2 Public Safety and Firefighter	8,655,627	—
Grand Total	\$ 688,707,517	—

Proportionate Share of Gross Pension Expense

December 31, 2022

System	
Noncontributory Retirement System	
Local Government	\$ 80,577,716
State and School	616,236,015
Higher Education	(53,227,203)
Total	643,586,528
Contributory Retirement System	
Local Government	22,302,562
State and School	15,980,858
Higher Education	7,612,620
Total	45,896,040
Public Safety Retirement System	
State of Utah	24,991,297
Other Division A (with Social Security)	38,210,450
Salt Lake City	8,808,230
Ogden	2,414,415
Provo	760,932
Logan	36,350
Bountiful	636,758
Other Division B (without Social Security)	27,542,356
Total	103,400,788
Firefighters Retirement System	
Division A (with Social Security)	(803,059)
Division B (without Social Security)	(5,573,447)
Total	(6,376,506)
Judges Retirement System	
Utah Governors and Legislators	46,416
Tier 2 Public Employees Retirement System	
Tier 2 Public Safety and Firefighter	36,138,698
Grand Total	\$ 1,038,938,245

D) Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions

The change in employer proportionate share is the amount of difference between the employer proportionate share of the net pension liability/(asset) in the prior year compared to the current year. The difference between the employer contributions and proportionate share of contributions is the difference between the total amount of the employer contributions and the amount of the proportionate share of the employer contributions.

The change in proportionate share and the difference between employer contributions and proportionate share of contributions is amortized over the average remaining service lives of the members (active and inactive members). The first year of amortization is recognized as pension expense with the remaining years shown as either a deferred outflow or deferred inflow of resources.

Notes to Schedules of Employer Allocations and Pension Amounts *(Concluded)*

Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions

Year Ended December 31, 2022

Cost Sharing Retirement System	Average Remaining Service Lives
Noncontributory Retirement System	
Local Government	2.86
State and School	2.99
Higher Education	1.89
Contributory Retirement System	
Local Government	0.42
State and School	0.13
Higher Education	0.31
Public Safety Retirement System	
State of Utah	1.91
Other Division A (with Social Security)	2.03
Other Division B (without Social Security)	2.90
Firefighters Retirement System	
Division A (with Social Security)	4.80
Division B (without Social Security)	3.56
Tier 2 Public Employees Retirement System	11.75
Tier 2 Public Safety and Firefighter Retirement System	15.19

E) Proportionate Share of Allocable Gross Pension Expense

The collective gross pension expense includes certain current period changes in the collective net pension liability/(asset), projected earnings on pension plan investments and amortization of deferred inflows of resources for the current period. The collective pension expense for the year ended December 31, 2022, is as shown in the right table on page 359.

F) Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions

The change in the employer's proportion of the collective net pension liability/(asset), since the prior measurement date (December 31, 2019), the net effect of the change on the employer's proportionate share of the collective net pension liability/(asset), and collective deferred outflows of resources and deferred inflows of resources related to pensions, determined at the beginning of the measurement period, is recognized in the employer's pension expense, beginning in the current period, using average remaining services lives for both active and inactive members. The table above illustrates the average remaining service lives for the cost sharing retirement plans.

G) Proportionate Share of Nonemployer Contributions

The Firefighters Retirement System collects fire insurance premium tax and receives budget appropriations. Fire insurance premium taxes are collected by the Utah State Treasurer and are used to help fund the Firefighters Retirement System. The proportionate share of nonemployer contributions is based upon the same methodology used to calculate each employer's proportionate share of the net pension liability/(asset) as was equal to \$22,738,231 in calendar year 2022 and was used to offset gross pension plan expense in the Firefighters Retirement System.

The Judges Retirement System collects court fees from the Utah Judiciary System and is used to help fund the retirement system. The Judges Retirement System collected \$1,335,491 in court fees in calendar year 2022 and was used to offset gross pension plan expense.

H) Total Employer Net Pension Plan Expense

This amount is equal to the gross pension expense less net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate of contributions and any proportionate share of nonemployer contributions.

Aggregation of Funds with a Net Pension Asset
(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions
AMERICAN FORK CITY	N/A	\$ (809,462)	645,157	(1,989,929)	142,832	216,566	100,612
BLUFFDALE CITY	N/A	(172,457)	53,593	(358,081)	8,306	29,418	11,928
BRIDGERLAND TECHNICAL COLLEGE	N/A	(35,225)	5,361,093	(4,556,220)	244,404	684,243	7,705
BRIGHAM CITY	N/A	(363,063)	289,368	(892,530)	64,064	97,135	45,127
CACHE COUNTY	N/A	(361,858)	288,408	(889,569)	63,851	96,813	44,977
CEDAR CITY	N/A	(542,498)	432,381	(1,333,640)	95,725	145,142	67,430
CEDAR MTN FIRE PROTECTION DIST	N/A	(82,178)	65,497	(202,021)	14,501	21,986	10,214
CITY OF DRAPER	N/A	(1,608,522)	1,282,023	(3,954,285)	283,828	430,349	199,931
CITY OF KANAB	N/A	(22,671)	18,069	(55,734)	4,000	6,066	2,818
CITY OF OREM	N/A	(4,552,561)	1,414,766	(9,452,723)	219,255	776,584	314,891
CITY OF SANTA CLARA	N/A	(81,019)	64,574	(199,172)	14,296	21,676	10,070
CITY OF SARATOGA SPRINGS	N/A	(901,669)	280,205	(1,872,183)	43,425	153,808	62,367
CITY OF SOUTH JORDAN	N/A	(1,905,894)	1,519,035	(4,685,325)	336,301	509,909	236,893
CITY OF SOUTH SALT LAKE	N/A	(1,883,694)	1,501,341	(4,630,750)	332,383	503,970	234,134
CITY OF ST GEORGE	N/A	(1,218,903)	971,490	(2,996,472)	215,079	326,109	151,503
CITY OF WEST JORDAN	N/A	(6,987,757)	2,171,534	(14,509,051)	336,536	1,191,985	483,329
CLINTON CITY	N/A	(304,400)	242,613	(748,318)	53,712	81,440	37,835
DIXIE TECHNICAL COLLEGE	N/A	(6,625)	1,008,353	(856,967)	45,969	128,697	1,449
EPHRAIM CITY	N/A	(51,363)	40,937	(126,267)	9,063	13,742	6,384
FARMINGTON CITY	N/A	(407,544)	324,821	(1,001,880)	71,912	109,036	50,656
HURRICANE VALLEY FIRE SSD	N/A	(511,999)	408,073	(1,258,664)	90,344	136,982	63,639
KAYSVILLE CITY	N/A	(224,731)	179,115	(552,464)	39,654	60,125	27,933
LAYTON CITY	N/A	(1,834,845)	1,462,407	(4,510,664)	323,764	490,901	228,062
LEHI CITY	N/A	(1,208,035)	962,827	(2,969,754)	213,161	323,202	150,153
LOGAN CITY	N/A	(3,151,358)	979,325	(6,543,332)	151,772	537,564	217,973
LONE PEAK PS DISTRICT	N/A	(910,797)	283,042	(1,891,136)	43,865	155,365	62,998
MAPLETON CITY	N/A	(42,036)	33,504	(103,339)	7,417	11,246	5,225
MOAB VALLEY FIRE PROTECTION	N/A	(80,310)	64,009	(197,429)	14,171	21,486	9,982
MOUNTAINLAND TECHNICAL COLLEGE	N/A	(13,275)	2,020,325	(1,717,009)	92,104	257,857	2,904
MURRAY CITY	N/A	(2,394,348)	1,908,342	(5,886,109)	422,490	640,592	297,605
N TOOELE FIRE PROTECTION SD	N/A	(93,843)	74,795	(230,697)	16,559	25,107	11,664
NORTH DAVIS FIRE DISTRICT	N/A	(755,868)	602,441	(1,858,176)	133,375	202,227	93,950
NORTH FORK SSD	N/A	(64,586)	51,476	(158,774)	11,396	17,280	8,028
NORTH SUMMIT FIRE SERVICE DIST	N/A	(50,851)	40,529	(125,009)	8,973	13,605	6,321
NORTH VIEW FIRE DISTRICT	N/A	(589,986)	470,230	(1,450,383)	104,105	157,847	73,332
OGDEN CITY CORP	N/A	(5,422,055)	1,684,972	(11,258,100)	261,131	924,904	375,032
PARK CITY FIRE SERVICE	N/A	(6,075,837)	1,888,144	(12,615,583)	292,617	1,036,427	420,253
PAYSON CITY	N/A	(103,860)	82,778	(255,321)	18,326	27,787	12,909
PLEASANT GROVE CITY	N/A	(399,349)	318,289	(981,734)	70,466	106,843	49,637
PRICE CITY	N/A	(64,805)	51,651	(159,313)	11,435	17,338	8,055
PROVO CITY CORP	N/A	(6,029,980)	1,873,893	(12,520,368)	290,409	1,028,605	417,081
RIVERDALE CITY	N/A	(332,069)	264,665	(816,336)	58,594	88,843	41,274
ROY CITY	N/A	(566,441)	451,464	(1,392,501)	99,950	151,547	70,406
SALT LAKE CITY CORP	N/A	(32,243,802)	10,020,171	(66,949,514)	1,552,888	5,500,207	2,230,238
SALT LAKE COMMUNITY COLLEGE	N/A	(196,578)	20,944,948	(17,931,420)	913,579	2,676,601	28,802
SANDY CITY	N/A	(6,266,938)	1,947,530	(13,012,375)	301,821	1,069,026	433,471
SANTAQUIN CITY	N/A	(76,831)	61,236	(188,876)	13,557	20,556	9,550
SMITHFIELD CITY CORP	N/A	(163,221)	130,090	(401,252)	28,801	43,669	20,288
SNOW COLLEGE	N/A	(37,078)	5,643,017	(4,795,818)	257,257	720,226	8,110
SO DAVIS METRO FIRE AGENCY	N/A	(2,765,334)	2,204,024	(6,798,106)	487,952	739,845	343,716
SOUTH OGDEN CITY	N/A	(637,948)	508,457	(1,568,290)	112,568	170,679	79,294
SPANISH FORK CITY	N/A	(138,909)	110,713	(341,485)	24,511	37,164	17,266
SPRINGVILLE CITY	N/A	(232,020)	184,925	(570,383)	40,941	62,075	28,839
STATE OF UTAH	N/A	(858,357)	684,127	(2,110,129)	151,460	229,648	106,689
SYRACUSE CITY CORP	N/A	(802,330)	639,473	(1,972,396)	141,574	214,658	99,726

Utah Retirement Systems

Deferred Outflows of Resources			Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
220	460,230	4,137	—	—	52,642	56,779	(25,030)	(21,108)	(209,278)	(255,416)
—	49,652	221	—	—	132,769	132,990	(7,636)	(51,965)	(21,955)	(81,556)
12,391	948,743	38,747	—	—	—	38,747	(1,071,056)	35,618	—	(1,035,438)
23,158	229,484	1,856	—	—	6,757	8,613	(11,227)	(867)	(93,866)	(105,960)
128	205,769	1,850	—	—	94,178	96,028	(11,189)	(27,521)	(93,555)	(132,265)
1,161	309,458	2,773	—	—	79,193	81,966	(16,775)	(22,325)	(140,257)	(179,357)
44	46,745	420	—	—	52,320	52,740	(2,541)	(14,230)	(21,246)	(38,017)
133,376	1,047,484	8,222	—	—	43,456	51,678	(49,739)	(12,924)	(415,866)	(478,529)
37,757	50,641	116	—	—	1,786	1,902	(701)	9,434	(5,861)	2,872
46,615	1,357,345	5,842	—	—	323	6,165	(201,586)	28,555	(579,566)	(752,597)
21,492	67,534	414	—	—	1,161	1,575	(2,505)	3,660	(20,947)	(19,792)
137	259,737	1,157	—	—	83,717	84,874	(39,926)	(36,715)	(114,787)	(191,428)
49,312	1,132,415	9,742	—	—	39,254	48,996	(58,934)	9,976	(492,749)	(541,707)
132,925	1,203,412	9,628	—	—	35,721	45,349	(58,248)	39,302	(487,009)	(505,955)
180,051	872,742	6,230	—	—	5,217	11,447	(37,691)	48,172	(315,134)	(304,653)
113,476	2,125,326	8,966	—	—	377,856	386,822	(309,415)	(82,660)	(889,580)	(1,281,655)
10,107	183,094	1,556	—	—	55,301	56,857	(9,413)	(8,893)	(78,699)	(97,005)
43	176,158	7,288	—	—	—	7,288	(201,452)	1,235	—	(200,217)
—	29,189	263	—	—	39,644	39,907	(1,588)	(10,827)	(13,279)	(25,694)
—	231,604	2,083	—	—	84,838	86,921	(12,602)	(24,787)	(105,366)	(142,755)
3,792	294,757	2,617	—	—	77,677	80,294	(15,832)	(22,166)	(132,372)	(170,370)
2,893	130,605	1,149	—	—	41,651	42,800	(6,949)	(14,358)	(58,102)	(79,409)
378,958	1,421,685	9,378	—	—	16,630	26,008	(56,737)	106,531	(474,380)	(424,586)
145,416	831,932	6,175	—	—	3,906	10,081	(37,355)	37,908	(312,325)	(311,772)
105,074	1,012,383	4,044	—	—	23,215	27,259	(139,541)	26,626	(401,185)	(514,100)
24,107	286,335	1,169	—	—	128,193	129,362	(40,330)	(37,144)	(115,949)	(193,423)
—	23,888	215	—	—	39,689	39,904	(1,300)	(10,470)	(10,868)	(22,638)
983	46,622	410	—	—	2,492	2,902	(2,483)	(621)	(20,763)	(23,867)
20,429	373,294	14,602	—	—	—	14,602	(403,627)	24,529	—	(379,098)
345,174	1,705,861	12,238	—	—	380	12,618	(74,038)	93,899	(619,033)	(599,172)
2,998	56,328	480	—	—	7,151	7,631	(2,902)	(1,327)	(24,262)	(28,491)
14,669	444,221	3,863	—	—	26,531	30,394	(23,373)	99	(195,422)	(218,696)
2,250	38,954	330	—	—	2,600	2,930	(1,997)	(1,510)	(16,698)	(20,205)
—	28,899	260	—	—	49,007	49,267	(1,572)	(12,886)	(13,147)	(27,605)
61	335,345	3,016	—	—	38,001	41,017	(18,244)	(13,410)	(152,535)	(184,189)
152,815	1,713,882	6,957	—	—	165,902	172,859	(240,087)	26,143	(690,257)	(904,201)
9,200	1,758,497	7,796	—	—	104,519	112,315	(269,036)	(38,744)	(773,487)	(1,081,267)
78	59,100	531	—	—	22,942	23,473	(3,212)	(5,985)	(26,852)	(36,049)
5,483	232,429	2,041	—	—	20,495	22,536	(12,349)	97	(103,247)	(115,499)
76	36,904	331	—	—	390	721	(2,004)	(9)	(16,755)	(18,768)
31,534	1,767,629	7,737	—	—	112,204	119,941	(267,005)	(24,926)	(767,649)	(1,059,580)
24,139	212,850	1,697	—	—	7,882	9,579	(10,268)	6,184	(85,853)	(89,937)
142,022	463,925	2,895	—	—	—	2,895	(17,516)	47,075	(146,447)	(116,888)
1,120,410	10,403,743	41,374	—	—	100,387	141,761	(1,427,743)	392,953	(4,104,812)	(5,139,602)
703	3,619,685	144,835	—	—	46,554	191,389	(3,468,829)	(69,716)	—	(3,538,545)
80,339	1,884,657	8,042	—	—	90,711	98,753	(277,498)	(20,356)	(797,815)	(1,095,669)
—	43,663	393	—	—	54,390	54,783	(2,376)	(15,105)	(19,864)	(37,345)
5,412	98,170	834	—	—	6,648	7,482	(5,047)	1,271	(42,199)	(45,975)
13,946	999,539	40,784	—	—	—	40,784	(1,127,379)	22,179	—	(1,105,200)
4,628	1,576,141	14,134	—	—	62,232	76,366	(85,510)	(9,759)	(714,946)	(810,215)
555	363,096	3,261	—	—	22,852	26,113	(19,727)	(6,484)	(164,935)	(191,146)
—	78,941	710	—	—	133,871	134,581	(4,295)	(35,201)	(35,913)	(75,409)
217	132,072	1,186	—	—	96,857	98,043	(7,175)	(25,669)	(59,986)	(92,830)
43,448	531,245	4,387	—	—	54,220	58,607	(26,542)	(1,629)	(221,919)	(250,090)
8,525	464,483	4,101	—	—	273,497	277,598	(24,810)	(70,109)	(207,434)	(302,353)

Aggregation of Funds with a Net Pension Asset

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Concluded)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
TOOELE CITY	N/A	\$ (37,291)	29,722	(91,675)	6,580	9,977	4,635
UINTAH FIRE SUPPRESSION SSD	N/A	(62,258)	49,621	(153,051)	10,986	16,657	7,738
UNIFIED FIRE AUTHORITY	N/A	(38,928,359)	12,097,481	(80,829,010)	1,874,820	6,640,472	2,692,595
UNIVERSITY OF UTAH	N/A	(893,256)	92,885,580	(79,569,062)	4,036,459	11,871,281	127,258
UNIVERSITY OF UTAH HOSPITAL	N/A	(688,804)	50,247,702	(43,500,697)	2,039,672	6,433,679	64,304
USU SPACE DYNAMICS LAB	N/A	(32,622)	4,964,868	(4,219,481)	226,341	633,673	7,136
UTAH STATE UNIVERSITY	N/A	(305,568)	43,269,402	(36,820,506)	1,957,704	5,523,746	61,720
UTAH TECH UNIVERSITY	N/A	(43,750)	6,658,590	(5,658,920)	303,555	849,845	9,570
UTAH VALLEY UNIVERSITY	N/A	(282,855)	26,675,578	(22,909,725)	1,140,795	3,410,788	35,966
WASATCH COUNTY FIRE DISTRICT	N/A	(850,423)	677,804	(2,090,624)	150,060	227,525	105,703
WASHINGTON CITY	N/A	(384,466)	306,427	(945,145)	67,840	102,861	47,787
WEBER FIRE DISTRICT	N/A	(5,035,750)	1,564,923	(10,455,995)	242,526	859,008	348,313
WEBER STATE UNIVERSITY	N/A	(138,906)	19,632,547	(16,707,084)	888,082	2,506,294	27,998
WEST VALLEY CITY	N/A	(9,190,040)	2,855,922	(19,081,767)	442,600	1,567,654	635,656
	N/A	\$ (154,514,321)	339,126,432	(564,436,098)	22,790,449	64,116,168	12,317,037
Units without a proportionate share for 2022 but had a proportionate share in a prior year							
MORGAN COUNTY	N/A	\$ —	—	—	—	—	—
HURRICANE CITY	N/A	—	—	—	—	—	—
IVINS CITY	N/A	—	—	—	—	—	—
NORTH LOGAN CITY	N/A	—	—	—	—	—	—
CITY OF WASHINGTON TERRACE	N/A	—	—	—	—	—	—
LEEDS AREA SS DISTRICT	N/A	—	—	—	—	—	—
GRAND TOTAL	N/A	\$ (154,514,321)	339,126,432	(564,436,098)	22,790,449	64,116,168	12,317,037

Utah Retirement Systems

Deferred Outflows of Resources			Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
—	21,192	191	—	—	35,939	36,130	(1,153)	(9,450)	(9,641)	(20,244)
14,988	50,369	318	—	—	39	357	(1,925)	5,014	(16,096)	(13,007)
500,258	11,708,145	49,952	—	—	113,983	163,935	(1,723,732)	131,632	(4,955,795)	(6,547,895)
3,181	16,038,179	639,925	—	—	429,297	1,069,222	(15,122,665)	(449,076)	—	(15,571,741)
344,796	8,882,451	323,361	—	—	—	323,361	(5,685,512)	411,061	—	(5,274,451)
59,455	926,605	35,883	—	—	—	35,883	(991,897)	72,240	—	(919,657)
1,497	7,544,667	310,366	—	—	73,112	383,478	(8,386,397)	(74,929)	—	(8,461,326)
19,928	1,182,898	48,124	—	—	—	48,124	(1,330,274)	95,340	—	(1,234,934)
876	4,588,425	180,857	—	—	54,180	235,037	(4,023,535)	502	—	(4,023,033)
107,801	591,089	4,347	—	—	20,633	24,980	(26,297)	17,906	(219,868)	(228,259)
1,151	219,639	1,965	—	—	171,434	173,399	(11,888)	(44,252)	(99,399)	(155,539)
471	1,450,318	6,462	—	—	472,989	479,451	(222,981)	(194,927)	(641,079)	(1,058,987)
95,519	3,517,893	140,793	—	—	—	140,793	(3,801,960)	159,256	—	(3,642,704)
139,752	2,785,662	11,792	—	—	76,199	87,991	(406,931)	13,339	(1,169,942)	(1,563,534)
4,742,402	103,966,056	2,219,819	—	—	4,467,616	6,687,435	(51,991,089)	342,695	(22,738,231)	(74,386,625)
211	211	—	—	—	1,073	1,073	—	(1,821)	—	(1,821)
—	—	—	—	—	—	—	—	1,031	—	1,031
410	410	—	—	—	—	—	—	2,023	—	2,023
42,989	42,989	—	—	—	402	402	—	13,544	—	13,544
2,383	2,383	—	—	—	159	159	—	838	—	838
—	—	—	—	—	—	—	—	1,158	—	1,158
4,788,394	104,012,048	2,219,819	—	—	4,469,250	6,689,069	(51,991,089)	359,467	(22,738,231)	(74,369,853)

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
4 CORNERS COMM BEHAVIOR HEALTH	N/A	\$ 529,556	3,051,452	(1,545,125)	179,408	311,357	110,574
ACTIVE RE ENTRY INC	N/A	230,596	582,857	(63,388)	40,710	40,433	14,125
ALPINE CITY	N/A	144,860	878,488	(464,209)	49,109	90,978	26,607
ALPINE SCHOOL DISTRICT	N/A	201,401,836	517,156,419	(61,431,779)	36,009,032	36,121,594	13,215,800
ALPINE UNISERV	N/A	135,264	345,001	(39,411)	24,152	24,101	8,730
AMERICAN FORK CITY	N/A	2,169,350	9,645,367	(3,966,036)	312,609	886,565	235,640
AMERICAN LEADERSHIP ACADEMY	N/A	2,900,201	7,533,524	(942,779)	529,774	533,624	206,674
AMES CHARTER SCHOOL	N/A	1,209,655	3,071,587	(342,600)	214,786	213,839	76,107
ANNABELLA TOWN	N/A	11,827	74,538	(40,571)	4,012	7,801	1,938
ASH CREEK SS DISTRICT	N/A	206,130	1,256,267	(666,447)	69,885	130,282	37,345
ASHLEY VALLEY IMPROV DIST	N/A	143,168	880,252	(470,201)	48,544	91,511	25,297
ASHLEY VALLEY SEWER MGMT BOARD	N/A	65,184	410,812	(223,606)	22,109	42,996	10,683
BALLARD CITY	N/A	36,150	225,540	(121,836)	12,260	23,541	6,114
BEAR LAKE SSD	N/A	37,976	234,905	(126,065)	12,878	24,462	6,593
BEAR RIVER ASSN OF GOVTS	N/A	234,179	1,409,854	(740,657)	79,382	145,708	43,870
BEAR RIVER HEALTH DEPT	N/A	912,578	5,475,852	(2,868,973)	309,330	565,392	172,474
BEAR RIVER MENTAL HEALTH	N/A	863,193	5,099,234	(2,637,509)	292,531	524,143	169,819
BEAR RIVER WATER DISTRICT	N/A	49,990	288,771	(146,537)	16,937	29,487	10,378
BEAVER CITY	N/A	198,867	1,189,333	(621,449)	67,405	122,685	37,914
BEAVER COUNTY	N/A	2,246,979	8,495,115	(2,856,851)	158,217	702,476	149,150
BEAVER HOUSING AUTHORITY	N/A	28,478	170,308	(88,985)	9,653	17,568	5,430
BEAVER SCHOOL DISTRICT	N/A	4,587,010	11,696,546	(1,334,345)	818,765	816,949	295,618
BEAVER VALLEY HOSPITAL	N/A	907,750	5,556,971	(2,958,287)	307,775	577,006	162,406
BENCHLAND WATER COMPANY	N/A	65,535	402,025	(214,369)	22,221	41,768	11,656
BICKNELL TOWN	N/A	5,980	37,689	(20,514)	2,028	3,945	980
BIG COTTONWOOD CANYON IMP DIST	N/A	6,622	35,665	(16,954)	2,242	3,562	1,591
BIG PLAINS WATER & SEWER SSD	N/A	8,702	54,841	(29,850)	2,951	5,740	1,426
BIG WATER MUNICIPAL CORP	N/A	16,244	60,006	(19,136)	840	5,061	1,410
BLANDING CITY	N/A	290,105	1,366,056	(597,378)	51,268	127,895	32,284
BLUFFDALE CITY	N/A	361,251	2,146,801	(1,115,909)	122,435	221,048	70,010
BONA VISTA WATER IMPROVE	N/A	90,282	552,816	(294,353)	30,611	57,406	16,141
BOUNTIFUL IRRIGATION DISTRICT	N/A	76,578	466,791	(247,667)	25,962	48,412	13,867
BOX ELDER CO MOSQ DIST	N/A	46,755	288,043	(154,102)	15,854	29,961	8,213
BOX ELDER COUNTY	N/A	3,699,642	15,140,966	(5,691,556)	380,292	1,303,725	289,601
BOX ELDER SCHOOL DISTRICT	N/A	33,981,851	87,386,312	(10,491,077)	6,054,328	6,085,901	2,212,694
BRIDGERLAND TECHNICAL COLLEGE	N/A	30,416	132,900	(48,535)	10,273	12,263	9,874
BRIGHAM CITY	N/A	1,734,090	7,961,475	(3,387,213)	289,245	738,618	196,461
BRYCE CANYON CITY	N/A	4,534	24,418	(11,608)	1,535	2,439	1,089
CACHE COUNTY	N/A	5,507,562	22,143,922	(8,110,842)	550,882	1,906,176	446,733
CACHE COUNTY SCHOOL DISTRICT	N/A	49,014,082	126,469,892	(15,510,997)	8,700,172	8,778,167	3,176,592
CACHE METRO PLANNING ORG	N/A	16,430	103,546	(56,360)	5,573	10,837	2,693
CACHE WATER DISTRICT	N/A	3,965	24,991	(13,603)	1,345	2,616	650
CANYONS SCHOOL DISTRICT	N/A	95,418,293	245,719,579	(29,484,965)	17,242,752	17,292,134	6,494,006
CARBON COUNTY	N/A	1,987,028	8,186,945	(3,094,174)	225,377	713,783	170,878
CARBON COUNTY REC/TRANS SSD	N/A	40	252	(137)	14	26	7
CARBON SCHOOL DISTRICT	N/A	9,358,741	23,968,067	(2,796,969)	1,679,600	1,679,655	618,006
CASTLE DALE CITY	N/A	15,713	92,098	(47,321)	5,325	9,444	3,152
CASTLE VALLEY SSD	N/A	88,775	534,357	(280,678)	30,092	55,223	16,639
CEDAR CITY	N/A	2,372,332	10,585,496	(4,379,891)	357,348	966,764	246,351
CEDAR CITY HOUSING AUTH	N/A	42,005	255,250	(135,096)	14,240	26,450	7,672
CEDAR MTN FIRE PROTECTION DIST	N/A	25,737	184,421	(101,023)	11,220	22,574	13,006
CENTERFIELD CITY	N/A	12,875	81,141	(44,165)	4,367	8,492	2,110
CENTERVILLE CITY	N/A	1,396,228	5,742,921	(2,182,167)	131,581	481,385	97,046
CENTRAL DAVIS SEWER DIST	N/A	185,835	1,130,191	(598,566)	63,002	117,138	33,866
CENTRAL IRON CO WATER CONSERV	N/A	40,844	228,236	(112,417)	13,832	23,070	9,120

Utah Retirement Systems

Deferred Outflows of Resources			Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
41,459	642,798	5,870	—	1,900	12,328	20,098	460,195	(20,620)	—	439,575
6,508	101,776	138	—	9	19,758	19,905	71,416	(5,182)	—	66,234
3,721	170,415	707	—	552	4,149	5,408	93,587	(4,147)	—	89,440
6,738,363	92,084,789	256,134	—	16,422	308,430	580,986	68,454,662	5,878,889	—	74,333,551
19,844	76,827	147	—	9	77	233	44,569	13,055	—	57,624
91,279	1,526,093	35,273	—	12,552	37,591	85,416	1,287,115	23,372	—	1,310,487
48,256	1,318,328	6,042	—	387	174,367	180,796	1,073,090	(34,972)	—	1,038,118
6,701	511,433	1,022	—	66	35,824	36,912	386,741	(31,099)	—	355,642
—	13,751	—	—	47	1,100	1,147	5,564	(3,043)	—	2,521
9,967	247,479	879	—	791	3,741	5,411	128,589	4,771	—	133,360
9,580	174,932	452	—	555	4,068	5,075	83,620	(10,255)	—	73,365
278	76,066	—	—	260	2,002	2,262	30,666	(1,105)	—	29,561
1,365	43,280	47	—	143	92	282	18,696	1,399	—	20,095
3,320	47,253	91	—	148	568	807	21,137	6,117	—	27,254
25,083	294,043	1,355	—	886	5,389	7,630	158,895	4,268	—	163,163
88,208	1,135,404	5,656	—	3,438	15,323	24,417	632,663	38,175	—	670,838
109,545	1,096,038	6,998	—	3,192	9,784	19,974	657,679	47,225	—	704,904
5,500	62,302	539	—	180	693	1,412	42,915	1,647	—	44,562
7,797	235,801	1,314	—	746	3,087	5,147	140,784	206	—	140,990
35,592	1,045,435	16,975	—	5,788	111,933	134,696	997,711	(112,960)	—	884,751
3,087	35,738	188	—	107	42	337	20,168	3,553	—	23,721
41,549	1,972,881	4,918	—	315	88,203	93,436	1,508,827	(17,765)	—	1,491,062
58,834	1,106,021	3,366	—	3,502	4,187	11,055	548,071	58,837	—	606,908
2,624	78,269	226	—	253	3,503	3,982	38,952	(1,899)	—	37,053
274	7,227	—	—	24	37	61	2,813	39	—	2,852
1,119	8,514	125	—	22	812	959	7,596	(4,179)	—	3,417
1,293	11,410	—	—	35	542	577	4,094	1,568	—	5,662
1,192	8,503	533	—	161	839	1,533	11,288	164	—	11,452
7,789	219,236	1,856	—	926	9,197	11,979	148,166	(10,752)	—	137,414
38,189	451,682	2,667	—	1,345	8,194	12,206	265,836	24,170	—	290,006
9,145	113,303	332	—	348	499	1,179	54,407	5,186	—	59,593
3,029	91,270	325	—	294	1,241	1,860	47,708	(6,229)	—	41,479
697	54,725	136	—	182	361	679	26,883	861	—	27,744
102,989	2,076,607	22,749	—	9,168	121,901	153,818	1,771,052	36,476	—	1,807,528
367,978	14,720,901	41,333	—	2,650	331,280	375,263	11,546,732	377,720	—	11,924,452
5,398	37,808	1,207	—	77	411,041	412,325	57,696	(1,367,091)	—	(1,309,395)
39,398	1,263,722	17,173	—	6,726	80,376	104,275	972,234	(98,815)	—	873,419
851	5,914	85	—	15	—	100	5,201	438	—	5,639
302,321	3,206,112	44,764	—	15,844	21,744	82,352	2,657,653	152,905	—	2,810,558
917,078	21,572,009	58,822	—	3,771	75,046	137,639	16,778,885	658,863	—	17,437,748
660	19,763	—	—	66	9	75	7,729	434	—	8,163
856	5,467	—	—	16	77	93	1,866	3,718	—	5,584
1,211,112	42,240,004	153,421	—	9,837	371,858	535,116	33,463,057	789,920	—	34,252,977
23,961	1,133,999	13,153	—	4,895	74,345	92,393	960,266	(130,693)	—	829,573
1	48	—	—	—	3,862	3,862	19	(6,326)	—	(6,307)
62,529	4,039,790	12,239	—	785	219,291	232,315	3,167,996	(159,773)	—	3,008,223
881	18,802	142	—	57	2,890	3,089	12,510	(5,314)	—	7,196
4,413	106,367	516	—	336	1,631	2,483	60,310	2,528	—	62,838
187,756	1,758,219	20,392	—	8,188	12,225	40,805	1,249,621	153,442	—	1,403,063
4,215	52,577	195	—	160	249	604	26,755	4,108	—	30,863
18,684	65,484	5,933	—	1,774	5,065	12,772	84,918	3,692	—	88,610
1,055	16,024	—	—	51	1,061	1,112	6,057	(369)	—	5,688
52,731	762,743	4,678	—	2,309	3,752	10,739	732,469	38,671	—	771,140
4,096	218,102	842	—	711	4,146	5,699	117,687	1,856	—	119,543
4,000	50,022	599	—	141	1,548	2,288	40,747	(407)	—	40,340

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
CENTRAL UT PUBLIC HEALTH	N/A	\$ 295,571	1,730,128	(888,003)	100,156	177,361	59,474
CENTRAL UTAH 911	N/A	384,903	2,304,642	(1,205,375)	130,465	237,813	73,157
CENTRAL UTAH COUNSELING CENTER	N/A	595,691	3,526,228	(1,827,020)	201,881	362,673	116,590
CENTRAL UTAH WATER DIST	N/A	1,415,949	8,630,181	(4,578,563)	480,053	895,021	256,475
CENTRAL VALLEY TOWN	N/A	10,501	62,524	(32,550)	3,560	6,442	2,026
CENTRAL WASATCH COMMISSION	N/A	19,743	115,364	(59,125)	6,690	11,821	3,989
CENTRAL WEBER SEWER DIST	N/A	340,100	2,009,717	(1,039,760)	115,258	206,594	66,859
CITY OF AURORA	N/A	10,008	57,863	(29,386)	3,390	5,910	2,073
CITY OF BOUNTIFUL	N/A	6,205,526	17,662,678	(3,276,460)	517,051	1,318,975	337,144
CITY OF CEDAR HILLS	N/A	218,087	1,332,170	(707,985)	73,941	138,242	39,258
CITY OF DRAPER	N/A	3,300,009	14,567,505	(5,952,833)	482,803	1,324,451	343,084
CITY OF DUCHESNE	N/A	38,525	222,561	(112,945)	13,053	22,727	7,997
CITY OF ENTERPRISE	N/A	75,710	471,367	(254,356)	25,627	49,177	12,760
CITY OF GREEN RIVER	N/A	67,569	396,652	(204,082)	22,897	40,697	13,501
CITY OF HARRISVILLE	N/A	442,467	1,776,689	(652,743)	41,626	152,293	31,776
CITY OF HELPER	N/A	138,603	575,531	(218,366)	16,590	50,807	13,727
CITY OF HOLLADAY	N/A	204,303	1,259,314	(674,003)	69,276	131,010	35,834
CITY OF KANAB	N/A	367,575	1,604,098	(641,704)	55,044	146,217	44,575
CITY OF MILFORD	N/A	52,921	318,475	(167,253)	17,939	32,910	9,925
CITY OF MOAB	N/A	1,084,723	5,016,021	(2,144,160)	194,995	465,953	131,491
CITY OF MONTICELLO	N/A	65,702	384,708	(197,508)	22,264	39,441	13,210
CITY OF NAPLES	N/A	215,661	951,137	(393,126)	21,233	78,920	15,452
CITY OF NORTH SALT LAKE	N/A	1,668,117	6,917,402	(2,642,340)	188,424	604,309	136,449
CITY OF OREM	N/A	6,124,517	27,509,419	(11,489,688)	2,016,738	2,603,414	763,653
CITY OF RIVERTON	N/A	2,202,269	10,053,897	(4,268,117)	756,772	974,216	283,945
CITY OF SANTA CLARA	N/A	330,134	2,003,080	(1,051,029)	114,248	209,969	70,564
CITY OF SARATOGA SPRINGS	N/A	1,910,197	8,907,179	(3,834,786)	662,311	874,947	284,548
CITY OF SOUTH JORDAN	N/A	4,404,444	20,960,140	(9,219,865)	809,116	1,985,491	547,270
CITY OF SOUTH SALT LAKE	N/A	4,173,884	16,932,236	(6,266,132)	437,528	1,467,962	356,571
CITY OF ST GEORGE	N/A	9,732,086	44,774,648	(19,102,840)	1,625,746	4,130,839	1,087,999
CITY OF TAYLORSVILLE	N/A	2,689,380	10,435,944	(3,659,578)	932,455	964,891	276,654
CITY OF UINTAH	N/A	20,744	125,951	(66,616)	7,033	13,048	3,798
CITY OF WASHINGTON TERRACE	N/A	156,092	951,422	(504,774)	52,921	98,672	28,271
CITY OF WENDOVER	N/A	74,484	359,016	(158,625)	25,811	35,561	12,444
CITY OF WEST HAVEN	N/A	188,406	1,105,655	(568,716)	63,844	113,429	37,676
CITY OF WEST JORDAN	N/A	5,939,011	27,021,200	(11,391,423)	2,063,028	2,640,654	818,433
CITY OF WOODLAND HILLS	N/A	56,271	345,754	(184,599)	19,080	35,938	9,961
CLEARFIELD CITY	N/A	1,725,900	7,779,732	(3,248,950)	271,818	715,045	188,483
CLEVELAND TOWN	N/A	3,498	18,840	(8,956)	1,184	1,882	840
CLINTON CITY	N/A	1,028,871	4,397,826	(1,736,159)	128,218	393,874	96,696
COALVILLE CITY	N/A	63,447	381,525	(200,241)	21,506	39,417	11,923
COLOR COUNTRY UNISERV	N/A	76,516	193,544	(21,135)	13,521	13,434	4,707
CORINNE CITY	N/A	140,438	720,473	(351,845)	—	41,868	—
COTTONWOOD HEIGHTS CITY	N/A	1,374,617	5,606,536	(2,088,524)	475,941	526,650	165,511
COTTONWOOD HEIGHTS P&R SRV	N/A	171,340	1,024,312	(535,053)	58,075	105,650	32,699
COTTONWOOD IMP DISTRICT	N/A	302,177	1,842,856	(978,146)	102,448	191,151	54,644
COUNCIL ON AGING GOLDEN AGE SS	N/A	25,456	153,724	(80,957)	8,629	15,901	4,729
DAGGETT COUNTY	N/A	171,686	893,223	(423,978)	41,950	87,426	25,194
DAGGETT SCHOOL DISTRICT	N/A	1,096,769	2,812,193	(330,170)	197,127	197,254	72,901
DAMMERON VALLEY FIRE SSD	N/A	1,349	10,801	(6,162)	651	1,400	853
DAVIS & WEBER COUNTY CANAL CO	N/A	547,540	2,801,175	(1,362,446)	3,463	164,310	3,328
DAVIS BEHAVIORAL HEALTH INC	N/A	1,969,978	11,707,121	(6,085,434)	667,666	1,205,439	381,767
DAVIS CO HOUSING AUTHORITY	N/A	201,125	1,093,658	(548,863)	24,815	83,245	13,992
DAVIS CO MOSQUITO ABATE	N/A	51,349	319,377	(172,120)	17,414	33,307	8,768
DAVIS COUNTY	N/A	11,988,016	54,265,567	(22,820,149)	1,896,301	4,979,286	1,244,285
DAVIS SCHOOL DISTRICT	N/A	187,852,226	483,383,208	(58,195,229)	33,516,822	33,697,396	12,299,319
DAVIS TECHNICAL COLLEGE	N/A	2,868,143	7,331,881	(847,472)	513,557	513,084	187,463
DAVIS UNISERV	N/A	125,715	314,212	(32,015)	21,884	21,604	7,194
DDI VANTAGE	N/A	3,221,037	16,432,428	(7,959,714)	40,870	972,969	39,283
DELTA CITY	N/A	98,750	597,053	(314,734)	33,475	61,780	18,288

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
13,330	350,321	2,723	—	1,081	13,738	17,542	236,958	(11,094)	—	225,864
24,062	465,497	2,487	—	1,446	2,526	6,459	270,486	39,309	—	309,795
58,873	740,017	4,680	—	2,208	7,726	14,614	448,520	7,700	—	456,220
43,923	1,675,472	6,027	—	5,433	36,599	48,059	882,824	50,405	—	933,229
3,192	15,220	75	—	39	1,681	1,795	7,642	6,370	—	14,012
1,708	24,208	186	—	72	2,431	2,689	15,974	3,708	—	19,682
14,785	403,496	2,745	—	1,258	4,685	8,688	258,681	1,438	—	260,119
2,048	13,421	107	—	36	3,305	3,448	8,552	1,189	—	9,741
46,319	2,219,489	403,439	—	8,137	53,391	464,967	1,775,752	(41,279)	—	1,734,473
20,808	272,249	868	—	839	1,343	3,050	133,806	9,281	—	143,087
153,958	2,304,296	32,030	—	12,068	37,136	81,234	1,787,552	139,799	—	1,927,351
2,734	46,511	415	—	139	4,638	5,192	33,061	(9,907)	—	23,154
3,143	90,707	95	—	298	399	792	38,982	4,133	—	43,115
4,193	81,288	599	—	248	4,965	5,812	53,327	(4,829)	—	48,498
38,052	263,747	2,226	—	1,004	7,849	11,079	184,844	19,255	—	204,099
3,551	84,675	1,877	—	596	6,230	8,703	80,698	(15,656)	—	65,042
22,815	258,935	580	—	794	6,465	7,839	116,979	14,449	—	131,428
32,026	277,862	6,728	—	2,041	3,406	12,175	252,634	9,980	—	262,614
1,421	62,195	309	—	200	1,015	1,524	36,005	144	—	36,149
78,339	870,778	8,819	—	3,236	66,402	78,457	638,817	(51,293)	—	587,524
6,280	81,195	603	—	241	23,790	24,634	52,582	(45,664)	—	6,918
8,796	124,401	1,651	—	686	28,892	31,229	165,038	(30,959)	—	134,079
69,744	998,926	8,173	—	3,640	5,125	16,938	745,760	94,218	—	839,978
161,838	5,545,643	58,979	—	50,363	83,069	192,411	4,812,726	138,192	—	4,950,918
82,411	2,097,344	12,004	—	15,521	48,376	75,901	1,451,914	149,328	—	1,601,242
11,928	406,709	7,606	—	2,818	5,189	15,613	296,510	(2,158)	—	294,352
153,791	1,975,597	27,867	—	17,383	17,436	62,686	1,514,210	119,914	—	1,634,124
144,006	3,485,883	59,610	—	22,753	67,883	150,246	2,673,756	(44,166)	—	2,629,590
231,279	2,493,340	39,966	—	13,702	26,143	79,811	2,113,864	267,688	—	2,381,552
211,639	7,056,223	80,700	—	32,599	51,387	164,686	5,526,326	86,134	—	5,612,460
576,278	2,750,278	19,005	—	24,714	3,472	47,191	1,793,891	419,180	—	2,213,071
1,743	25,622	98	—	79	2,785	2,962	13,294	1,941	—	15,235
8,061	187,925	664	—	600	5,375	6,639	97,292	(16,819)	—	80,473
3,827	77,643	1,321	—	664	9,112	11,097	65,002	(2,138)	—	62,864
25,964	240,913	1,678	—	691	1,593	3,962	148,964	20,671	—	169,635
132,585	5,654,700	80,572	—	56,800	251,487	388,859	4,463,371	(289,619)	—	4,173,752
7,913	72,892	182	—	218	2,054	2,454	33,027	9,048	—	42,075
86,477	1,261,823	16,891	—	6,472	18,236	41,599	955,003	4,458	—	959,461
531	4,437	66	—	11	636	713	4,012	(134)	—	3,878
37,267	656,055	11,807	—	4,399	7,996	24,202	537,080	49,838	—	586,918
4,279	77,125	376	—	239	464	1,079	43,381	4,843	—	48,224
3,810	35,472	49	—	3	67	119	23,818	3,381	—	27,199
—	41,868	—	—	—	—	—	304,542	(16,237)	—	288,305
50,860	1,218,962	13,023	—	12,129	25,297	50,449	1,006,216	(4,218)	—	1,001,998
5,167	201,591	1,140	—	642	9,454	11,236	121,590	2,508	—	124,098
5,133	353,376	1,264	—	1,160	19,935	22,359	187,598	(26,593)	—	161,005
2,895	32,154	138	—	97	14,442	14,677	16,925	(18,157)	—	(1,232)
11,773	166,343	1,154	—	559	10,369	12,082	105,371	(9,666)	—	95,705
28,476	495,758	1,505	—	96	21,604	23,205	374,132	1,283	—	375,415
177	3,081	447	—	135	—	582	5,845	12	—	5,857
1,815	172,916	407	—	26	1,181	1,614	1,184,562	(111,581)	—	1,072,981
202,403	2,457,275	14,540	—	7,335	18,150	40,025	1,449,546	154,926	—	1,604,472
6,166	128,218	492	—	275	2,423	3,190	329,510	1,257	—	330,767
2,862	62,351	87	—	202	256	545	27,286	2,309	—	29,595
235,468	8,355,340	71,539	—	33,336	448,055	552,930	6,013,409	(95,886)	—	5,917,523
4,327,525	83,841,062	238,072	—	15,264	1,768,901	2,022,237	64,172,139	1,142,307	—	65,314,446
46,164	1,260,268	3,464	—	222	164,786	168,472	959,222	(48,980)	—	910,242
34,016	84,698	—	—	—	—	—	35,878	26,984	—	62,862
19,179	1,072,301	4,801	—	308	6,359	11,468	6,951,986	(334,394)	—	6,617,592
2,749	116,292	519	—	375	2,493	3,387	65,131	(2,341)	—	62,790

Aggregation of Funds with a Net Pension Liability
 (Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
DIXIE TECHNICAL COLLEGE	N/A	\$ 10,834	47,337	(17,288)	3,659	4,368	3,517
DUCHESNE CO WATER CONSERV DIST	N/A	30,612	188,587	(100,891)	10,380	19,616	5,378
DUCHESNE COUNTY	N/A	2,124,805	9,633,685	(4,094,784)	229,114	788,903	164,978
DUCHESNE SCHOOL DISTRICT	N/A	13,262,541	34,596,754	(4,481,333)	2,372,799	2,410,962	897,759
E DUCHESNE CUL WATER IMP DIST	N/A	12,538	79,017	(43,009)	4,253	8,270	2,055
EAGLE MOUNTAIN CITY	N/A	725,799	4,286,459	(2,216,622)	245,969	440,565	142,883
EAST CARBON CITY	N/A	106,314	452,255	(177,567)	13,421	40,261	9,887
EAST HOLLYWOOD HIGH SCHOOL	N/A	687,635	1,784,285	(222,164)	125,442	126,286	48,729
EDUCATORS MUTUAL INSURANCE	N/A	3,837,472	9,612,169	(992,165)	669,823	662,043	222,557
ELK RIDGE CITY	N/A	40,490	221,532	(106,956)	13,709	22,243	9,435
ELWOOD TOWN	N/A	12,036	64,801	(30,796)	4,075	6,473	2,892
EMERY CO CARE & REHAB CTR	N/A	734,515	3,737,508	(1,803,522)	13,621	223,211	13,092
EMERY COUNTY	N/A	1,505,461	6,375,602	(2,492,848)	184,165	565,896	135,160
EMERY COUNTY RECREATION SSD	N/A	4,868	26,204	(12,452)	1,648	2,617	1,169
EMERY SCHOOL DISTRICT	N/A	7,753,822	20,074,232	(2,521,998)	1,362,993	1,382,449	491,190
EMERY TOWN	N/A	17,671	89,223	(42,560)	635	5,466	610
EMERY WATER CONSERV DIST	N/A	55,175	329,327	(171,801)	18,701	33,952	10,573
ENOCH CITY	N/A	285,968	1,232,122	(488,841)	39,689	110,730	30,013
EPHRAIM CITY	N/A	584,571	2,538,723	(1,021,082)	82,247	227,524	56,224
ESCALANTE CITY	N/A	33,623	205,860	(109,605)	11,399	21,377	6,012
ESPERANZA ELEMENTARY SCHOOL	N/A	767,511	2,031,219	(276,421)	143,486	145,863	60,063
EUREKA CITY CORPORATION	N/A	16,294	99,353	(52,728)	5,524	10,305	2,947
FAIRVIEW CITY	N/A	119,009	542,706	(229,994)	19,265	49,964	12,468
FARMINGTON CITY	N/A	1,369,501	5,908,377	(2,352,810)	184,175	531,356	137,268
FARR WEST CITY	N/A	82,738	505,820	(268,993)	28,053	52,502	14,860
FAST FORWARD CHARTER HS	N/A	765,680	1,961,902	(229,527)	137,500	137,539	50,700
FERRON CITY	N/A	22,650	132,390	(67,865)	7,676	13,566	4,574
FILLMORE CITY	N/A	71,830	432,239	(226,987)	24,349	44,666	13,473
FIVE-COUNTY ASSN OF GOVTS	N/A	437,188	2,526,733	(1,295,727)	124,743	243,817	72,600
FOUNTAIN GREEN CITY	N/A	18,774	114,033	(60,753)	5,902	11,788	2,886
FOX HOLLOW GOLF COURSE	N/A	31,299	180,060	(91,045)	10,603	18,364	6,559
FRANCIS CITY	N/A	34,776	209,600	(110,209)	11,789	21,669	6,496
FRUIT HEIGHTS CITY	N/A	73,406	449,053	(238,922)	24,888	46,618	13,160
GARFIELD COUNTY	N/A	1,106,849	4,593,797	(1,754,206)	125,299	402,537	93,698
GARFIELD SCHOOL DISTRICT	N/A	3,343,564	8,585,067	(1,015,098)	601,997	602,816	223,950
GARLAND CITY	N/A	188,710	812,660	(332,316)	2,809	53,005	5,044
GENOLA TOWN	N/A	20,030	126,233	(68,709)	6,794	13,212	3,283
GRAND COUNTY	N/A	1,961,537	9,040,091	(3,859,272)	336,905	838,999	225,892
GRAND COUNTY EMS SSD	N/A	103,443	585,055	(291,371)	35,037	59,359	22,515
GRAND SCHOOL DISTRICT	N/A	5,303,304	13,744,814	(1,701,750)	966,032	971,953	373,495
GRAND WATER/SEWER SERVICE	N/A	63,450	373,292	(192,418)	21,502	38,324	12,610
GRANGER-HUNTER IMP DIST	N/A	676,997	4,078,725	(2,143,972)	229,489	421,620	126,582
GRANITE SCHOOL DISTRICT	N/A	180,289,869	465,874,947	(57,582,041)	32,021,159	32,342,344	11,737,579
GRANITE UNISERV	N/A	136,424	345,096	(37,696)	24,108	23,954	8,395
GRANTSVILLE CITY	N/A	780,526	3,350,501	(1,323,319)	107,805	300,359	81,782
GREATER SALT LAKE MUNICIPAL SD	N/A	380,112	2,267,137	(1,182,002)	128,834	233,683	72,979
GUNNISON CITY	N/A	55,642	338,521	(179,338)	18,864	35,090	10,130
GUNNISON VALLEY HOSPITAL	N/A	1,199,699	7,235,468	(3,806,527)	406,681	748,157	223,681
GUNNISON VALLEY POLICE DEPT	N/A	126,482	445,300	(134,028)	43,840	39,574	10,877
HEBER CITY	N/A	1,330,674	6,004,441	(2,506,887)	215,175	552,011	150,079
HEBER LIGHT & POWER	N/A	562,401	3,412,363	(1,803,884)	190,661	353,442	103,155
HEBER VALLEY HISTORIC RAILROAD	N/A	289,305	754,531	(96,224)	53,112	53,606	21,051
HEBER VALLEY SSD	N/A	36,847	232,222	(126,399)	12,498	24,305	6,039
HERRIMAN CITY	N/A	2,630,342	11,846,746	(4,955,868)	904,667	1,143,728	339,763
HIGH DESERT UNISERV	N/A	45,712	116,588	(13,317)	8,162	8,145	2,950
HIGH SCHOOL ACTIVITIES ASSN	N/A	444,971	1,120,843	(119,543)	78,217	77,542	26,703
HIGH VALLEY TRANSIT DISTRICT	N/A	2,898	16,748	(8,503)	981	1,711	601
HIGHLAND CITY	N/A	264,578	1,604,373	(847,723)	89,694	166,148	48,608
HINCKLEY TOWN	N/A	15,563	92,975	(48,537)	5,275	9,588	2,975
HONEYVILLE CITY	N/A	51,028	260,897	(126,785)	392	15,334	377

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
1,817	13,361	430	—	28	263	721	20,551	180	—	20,731
1,119	36,493	89	—	119	3,017	3,225	17,605	(6,833)	—	10,772
40,450	1,223,445	15,167	—	5,665	125,530	146,362	1,930,392	(81,924)	—	1,848,468
158,464	5,839,984	21,876	—	1,403	207,623	230,902	4,814,144	51,280	—	4,865,424
130	14,708	—	—	50	—	50	5,898	533	—	6,431
74,585	904,002	5,907	—	2,683	6,342	14,932	553,835	52,047	—	605,882
5,794	69,363	920	—	348	6,836	8,104	53,860	(1,894)	—	51,966
5,094	305,551	1,392	—	89	37,703	39,184	252,784	(30,607)	—	222,177
1,483	1,555,906	441	—	28	315,553	316,022	1,113,101	(290,133)	—	822,968
6,909	52,296	691	—	136	5,735	6,562	43,882	5,691	—	49,573
4,895	18,335	227	—	40	306	573	13,820	5,170	—	18,990
9,170	259,094	1,600	—	103	1,990	3,693	1,581,849	(122,350)	—	1,459,499
21,910	907,131	12,288	—	4,833	29,801	46,922	737,937	(65,715)	—	672,222
326	5,760	92	—	16	335	443	5,592	(42)	—	5,550
42,133	3,278,765	8,015	—	514	210,527	219,056	2,645,071	(182,536)	—	2,462,535
728	7,439	75	—	5	127	207	37,809	1,220	—	39,029
3,422	66,648	378	—	206	660	1,244	39,541	692	—	40,233
26,702	207,134	3,208	—	1,073	4,543	8,824	164,159	19,773	—	183,932
18,549	384,544	2,700	—	1,199	9,175	13,074	285,036	26,664	—	311,700
998	39,786	124	—	130	2,311	2,565	20,275	988	—	21,263
308,236	657,648	2,395	—	154	—	2,549	316,336	174,530	—	490,866
987	19,763	68	—	62	512	642	10,128	948	—	11,076
9,316	91,013	659	—	322	347	1,328	59,339	8,916	—	68,255
76,794	929,593	14,980	—	5,360	16,489	36,829	747,708	87,373	—	835,081
4,002	99,417	321	—	319	458	1,098	50,457	3,108	—	53,565
40,585	366,324	1,022	—	66	2,707	3,795	260,022	17,636	—	277,658
1,360	27,176	213	—	83	675	971	18,302	(556)	—	17,746
2,546	85,034	420	—	272	3,075	3,767	48,889	77	—	48,966
30,689	471,849	3,029	—	1,359	4,976	9,364	431,914	(550)	—	431,364
607	21,183	—	—	69	13,224	13,293	8,589	(12,831)	—	(4,242)
2,652	38,178	353	—	112	3,684	4,149	27,416	(3,664)	—	23,752
4,272	44,226	197	—	132	2,422	2,751	23,427	4,896	—	28,323
8,307	92,973	279	—	283	2,805	3,367	44,557	(5,182)	—	39,375
26,030	647,564	7,824	—	3,093	98,114	109,031	523,088	(161,417)	—	361,671
66,709	1,495,472	4,841	—	310	17,299	22,450	1,150,847	(39,642)	—	1,111,205
3,746	64,604	1,015	—	274	6,875	8,164	256,636	33,937	—	290,573
950	24,239	—	—	80	—	80	9,423	1,258	—	10,681
142,749	1,544,545	16,764	—	6,630	21,519	44,913	1,100,239	85,238	—	1,185,477
19,147	136,058	1,373	—	363	1,428	3,164	98,019	30,352	—	128,371
50,051	2,361,531	10,391	—	666	248,095	259,152	1,935,554	(184,946)	—	1,750,608
4,639	77,075	546	—	233	3,113	3,892	49,474	6,766	—	56,240
28,173	805,864	3,858	—	2,562	39,532	45,952	457,197	(64,159)	—	393,038
1,217,232	77,318,314	225,053	—	14,430	7,251,526	7,491,009	62,161,261	(3,925,258)	—	58,236,003
747	57,204	87	—	6	22,624	22,717	42,483	(21,206)	—	21,277
80,041	569,987	8,483	—	2,795	9,143	20,421	448,288	47,904	—	496,192
74,293	509,789	2,637	—	1,421	12,105	16,163	273,625	251,355	—	524,980
5,967	70,051	249	—	213	2,634	3,096	35,145	(4,002)	—	31,143
129,022	1,507,541	6,680	—	4,546	16,911	28,137	804,579	42,430	—	847,009
3,784	98,075	556	—	1,158	10,873	12,587	80,427	(7,334)	—	73,093
54,977	972,242	12,926	—	4,736	62,958	80,620	760,544	56,425	—	816,969
18,877	666,135	2,711	—	2,147	4,562	9,420	362,062	(10,037)	—	352,025
25,568	153,337	667	—	43	5,688	6,398	109,662	21,652	—	131,314
685	43,527	—	—	147	310	457	17,335	1,893	—	19,228
51,806	2,439,964	16,321	—	19,073	81,478	116,872	1,779,655	156,964	—	1,936,619
5,717	24,974	50	—	3	71	124	15,060	3,004	—	18,064
13,073	195,535	184	—	12	267	463	134,473	7,622	—	142,095
734	4,027	31	—	10	—	41	2,480	387	—	2,867
28,125	332,575	1,295	—	1,009	4,417	6,721	171,032	5,124	—	176,156
2,466	20,304	105	—	59	953	1,117	11,093	530	—	11,623
357	16,460	46	—	3	63	112	110,339	(2,625)	—	107,714

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
HOOPER CITY	N/A	\$ 55,322	317,517	(160,216)	18,742	32,359	11,657
HOOPER WATER IMPROV DIST	N/A	105,728	651,729	(348,825)	35,850	67,801	18,542
HOUSING AUTH OF CARBON CO	N/A	55,838	335,517	(175,986)	18,927	34,657	10,515
HOUSING AUTHORITY OF SLC	N/A	576,277	3,390,780	(1,747,992)	195,287	348,129	114,498
HOUSING AUTHORITY OGDEN CITY	N/A	142,256	859,514	(452,842)	48,224	88,920	26,394
HOUSING CONNECT	N/A	679,607	3,920,757	(1,987,371)	230,247	400,201	141,517
HUNTINGTON CITY	N/A	29,275	183,360	(99,342)	9,929	19,159	4,892
HURRICANE CITY	N/A	1,776,853	7,662,409	(3,055,027)	244,517	684,911	171,566
HURRICANE VALLEY FIRE SSD	N/A	128,234	914,569	(506,914)	53,635	109,480	55,416
HYDE PARK CITY	N/A	112,768	677,204	(355,041)	38,225	69,938	21,268
HYRUM CITY	N/A	299,416	1,840,393	(982,851)	101,524	191,312	52,949
IMPACT MITIGATION SSD	N/A	13,383	84,342	(45,908)	4,539	8,827	2,193
INTECH COLLEGIATE HIGH SCHOOL	N/A	492,385	1,282,224	(162,364)	90,224	90,994	35,548
IRON COUNTY	N/A	3,163,932	12,893,392	(4,802,945)	329,677	1,111,625	267,743
IRON SCHOOL DISTRICT	N/A	25,851,103	66,031,963	(7,601,390)	4,624,263	4,618,137	1,682,251
ITINERIS HIGH SCHOOL	N/A	927,989	2,383,944	(282,598)	167,186	167,457	62,329
IVINS CITY	N/A	688,236	3,073,327	(1,271,115)	105,515	280,936	73,601
JORDAN RIVER COMMISSION	N/A	24,341	152,054	(82,215)	8,255	15,876	4,102
JORDAN SCHOOL DISTRICT	N/A	143,421,971	370,095,722	(45,074,048)	25,780,005	25,931,290	9,647,465
JORDAN UNISERV	N/A	57,702	159,942	(25,969)	11,421	11,861	5,550
JORDAN VALLEY WATER CONSERV	N/A	1,595,758	9,610,238	(5,062,719)	517,983	979,335	280,955
JORDANELLE SSD	N/A	354,979	2,131,129	(1,117,036)	120,326	220,076	66,998
JUAB COUNTY	N/A	996,380	4,429,727	(1,825,931)	147,021	404,141	102,493
JUAB SCHOOL DISTRICT	N/A	6,714,296	17,189,761	(2,002,493)	1,204,499	1,204,328	442,552
JUAB SPECIAL SERVICE FIRE DIST	N/A	20,421	116,495	(58,468)	6,918	11,851	4,362
KAMAS CITY	N/A	155,851	635,489	(238,228)	16,425	54,736	11,571
KANE COUNTY	N/A	2,049,815	8,210,283	(2,990,688)	208,886	703,388	166,926
KANE COUNTY WATER CONSERV DIST	N/A	99,946	603,232	(317,547)	33,881	62,388	18,597
KANE SCHOOL DISTRICT	N/A	4,514,328	11,571,941	(1,356,752)	811,107	811,517	299,618
KANOSH TOWN CORPORATION	N/A	7,337	39,505	(18,779)	2,483	3,946	1,762
KAYSVILLE CITY	N/A	2,164,368	9,394,382	(3,775,558)	290,652	846,080	208,046
KEARNS IMPROVEMENT DIST	N/A	381,003	2,264,241	(1,191,469)	102,991	217,228	53,639
LAVERKIN CITY	N/A	305,788	1,315,287	(525,138)	39,828	117,066	26,446
LAYTON CITY	N/A	4,489,197	19,067,215	(7,469,893)	531,558	1,680,907	417,111
LEHI CITY	N/A	4,331,227	20,053,464	(8,588,663)	747,713	1,872,036	517,068
LEWISTON CITY	N/A	40,120	226,605	(112,718)	13,589	22,982	8,758
LINDON CITY	N/A	987,621	4,404,789	(1,826,801)	146,790	400,625	95,898
LOGAN CITY	N/A	5,802,686	24,372,757	(9,503,144)	873,702	2,232,298	512,001
LOGAN SCHOOL DISTRICT	N/A	15,254,478	39,067,748	(4,559,331)	2,737,743	2,737,851	1,007,401
LONE PEAK PS DISTRICT	N/A	677,844	2,450,392	(766,455)	237,518	223,097	68,440
MAESER WATER IMPROVE DIST	N/A	58,577	369,174	(200,943)	19,869	38,638	9,600
MAGNA MOSQUITO ABATEMENT	N/A	20,992	132,302	(72,012)	7,120	13,847	3,440
MANTI CITY	N/A	94,269	559,766	(290,776)	31,949	57,623	18,306
MAPLETON CITY	N/A	687,020	3,145,221	(1,334,811)	113,076	291,342	76,772
MARRIOTT-SLATERVILLE CITY	N/A	57,994	346,704	(181,104)	19,657	35,760	11,067
MAYFIELD TOWN	N/A	6,396	40,151	(21,791)	2,170	4,198	1,062
MENDON CITY	N/A	8,869	55,897	(30,425)	3,008	5,850	1,454
METRO WATER DIST SLC/SANDY	N/A	841,947	5,145,835	(2,735,953)	285,458	534,077	151,325
MIDVALE CITY	N/A	741,781	4,394,602	(2,278,489)	251,395	452,091	144,885
MIDVALLEY IMPROVEMENT DISTRICT	N/A	115,908	716,777	(384,594)	39,304	74,634	20,136
MIDWAY CITY	N/A	184,766	1,110,135	(582,257)	62,630	114,666	34,799
MILITARY INSTALLATION DEVEL	N/A	66,048	397,601	(208,861)	22,389	41,091	12,376
MILLARD CO CARE & REHAB INC	N/A	250,571	1,509,660	(793,566)	84,939	156,055	46,847
MILLARD COUNTY	N/A	2,055,160	8,840,340	(3,518,165)	268,693	791,320	192,454
MILLARD SCHOOL DISTRICT	N/A	10,768,092	27,533,784	(3,186,845)	1,928,711	1,927,195	704,825
MILLCREEK CITY	N/A	425,005	2,581,646	(1,365,974)	144,084	267,485	77,710
MILLVILLE CITY	N/A	28,728	181,055	(98,549)	9,744	18,949	4,708
MINERSVILLE TOWN	N/A	20,761	128,537	(69,029)	7,040	13,388	3,594
MOAB VALLEY FIRE PROTECTION	N/A	8,699	61,099	(33,179)	3,732	7,403	4,241
MONA CITY	N/A	23,407	136,027	(69,387)	7,931	13,915	4,792

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
3,684	66,442	639	—	198	9,107	9,944	49,012	(6,345)	—	42,667
5,026	127,219	300	—	411	416	1,127	60,519	5,422	—	65,941
3,619	67,718	337	—	211	2,080	2,628	38,369	5,409	—	43,778
23,441	681,355	4,949	—	2,120	50,211	57,280	449,055	(44,065)	—	404,990
10,317	173,855	760	—	541	1,276	2,577	94,256	5,424	—	99,680
43,928	815,893	7,438	—	2,442	36,656	46,536	587,147	3,808	—	590,955
14	33,994	23	—	116	711	850	14,613	(928)	—	13,685
68,576	1,169,570	10,277	—	4,127	46,014	60,418	890,231	11,498	—	901,729
26,204	244,735	23,799	—	7,319	7,371	38,489	344,578	15,604	—	360,182
6,154	135,585	688	—	425	366	1,479	77,775	2,237	—	80,012
14,139	359,924	957	—	1,160	1,101	3,218	175,277	32,041	—	207,318
—	15,559	—	—	53	2,223	2,276	6,296	(1,219)	—	5,077
40,863	257,629	1,094	—	70	1,470	2,634	184,952	23,250	—	208,202
63,045	1,772,090	29,378	—	10,046	56,939	96,363	1,678,324	(69,872)	—	1,608,452
711,618	11,636,269	30,122	—	1,931	119,113	151,166	8,601,145	286,964	—	8,888,109
13,171	410,143	1,369	—	88	9,622	11,079	320,448	23,457	—	343,905
36,255	496,307	6,332	—	2,418	6,604	15,354	375,731	26,214	—	401,945
1,157	29,390	28	—	96	797	921	12,452	3,819	—	16,271
1,727,000	63,085,760	217,894	—	13,971	807,033	1,038,898	50,238,788	2,854,917	—	53,093,705
1,853	30,685	334	—	21	37,801	38,156	30,017	(22,077)	—	7,940
44,167	1,822,440	7,539	—	5,825	16,847	30,211	1,136,944	(31,770)	—	1,105,174
31,062	438,462	2,177	—	1,338	2,500	6,015	245,280	33,547	—	278,827
41,720	695,375	9,309	—	3,687	33,723	46,719	526,197	(9,285)	—	516,912
72,638	2,924,017	8,658	—	555	37,266	46,479	2,267,844	12,872	—	2,280,716
3,233	26,364	251	—	72	224	547	18,614	6,274	—	24,888
2,823	85,555	233	—	179	983	1,395	62,664	3,255	—	65,919
78,360	1,157,560	13,023	—	4,502	41,543	59,068	980,639	25,373	—	1,006,012
12,014	126,880	547	—	379	696	1,622	66,695	10,881	—	77,576
53,778	1,976,020	6,128	—	393	7,140	13,661	1,537,253	16,449	—	1,553,702
2,558	10,749	138	—	24	52	214	8,417	1,657	—	10,074
101,302	1,446,080	19,634	—	7,739	12,278	39,651	1,102,981	147,547	—	1,250,528
13,204	387,062	953	—	1,178	7,315	9,446	344,684	67,851	—	412,535
6,037	189,377	874	—	547	9,836	11,257	132,696	(665)	—	132,031
189,834	2,819,410	55,150	—	19,345	56,050	130,545	2,621,634	31,876	—	2,653,510
163,755	3,300,572	52,367	—	19,313	36,522	108,202	2,587,140	177,821	—	2,764,961
3,146	48,475	539	—	141	5,396	6,076	38,241	(3,303)	—	34,938
39,883	683,196	4,705	—	2,441	23,873	31,019	465,805	(36,111)	—	429,694
83,091	3,701,092	229,352	—	17,773	66,908	314,033	2,129,378	(34,472)	—	2,094,906
514,832	6,997,827	19,959	—	1,280	118,186	139,425	5,164,165	65,311	—	5,229,476
11,451	540,506	9,197	—	7,923	38,702	55,822	504,219	(24,318)	—	479,901
466	68,573	—	—	234	1,031	1,265	27,558	106	—	27,664
690	25,097	—	—	84	—	84	9,876	1,116	—	10,992
3,783	111,661	705	—	350	6,328	7,383	69,697	(2,686)	—	67,011
53,912	535,102	6,683	—	2,645	3,757	13,085	380,469	43,406	—	423,875
4,058	70,542	386	—	218	362	966	41,151	7,231	—	48,382
291	7,721	3	—	25	827	855	3,125	(1,419)	—	1,706
142	10,454	—	—	35	351	386	4,173	(531)	—	3,642
47,233	1,018,093	3,292	—	3,242	3,719	10,253	514,476	28,311	—	542,787
32,172	880,543	5,755	—	2,752	7,043	15,550	555,875	(418)	—	555,457
4,493	138,567	281	—	453	395	1,129	64,647	(500)	—	64,147
22,602	234,697	1,115	—	697	1,242	3,054	127,013	24,823	—	151,836
8,909	84,765	383	—	250	4,028	4,661	44,844	22,697	—	67,541
13,797	301,638	1,427	—	948	20,167	22,542	169,187	(1,356)	—	167,831
41,412	1,293,879	16,460	—	6,572	82,250	105,282	1,023,716	(145,947)	—	877,769
134,948	4,695,679	13,155	—	843	45,680	59,678	3,607,428	(60,961)	—	3,546,467
52,130	541,409	1,989	—	1,625	2,758	6,372	271,445	71,714	—	343,159
4,963	38,364	—	—	115	509	624	13,515	1,730	—	15,245
1,328	25,350	47	—	81	2,678	2,806	11,469	(9,278)	—	2,191
2,903	18,279	1,876	—	559	9,207	11,642	27,455	(4,013)	—	23,442
7,164	33,802	236	—	85	212	533	19,494	12,372	—	31,866

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
MONROE CITY	N/A	\$ 71,510	437,232	(232,542)	24,245	45,384	12,838
MONTICELLO ACADEMY	N/A	1,705,556	4,475,372	(586,733)	315,493	319,387	127,983
MORGAN CITY CORPORATION	N/A	167,955	1,012,122	(532,122)	56,933	104,631	31,384
MORGAN COUNTY	N/A	747,113	3,100,984	(1,184,378)	87,312	270,837	63,222
MORGAN SCHOOL DISTRICT	N/A	7,564,461	19,419,832	(2,294,418)	1,361,695	1,363,440	506,238
MORONI CITY	N/A	27,832	145,313	(69,058)	7,041	14,230	4,251
MOUNT PLEASANT CITY	N/A	308,719	1,360,838	(557,074)	44,921	122,879	29,667
MOUNTAIN GREEN SEWER IMP DIST	N/A	7,649	41,161	(19,552)	2,589	4,111	1,839
MOUNTAIN REGIONAL WATER SSD	N/A	314,635	1,884,841	(986,210)	106,647	194,522	59,723
MOUNTAINLAND ASSN OF GOVT	N/A	553,585	3,315,194	(1,739,156)	178,609	336,609	98,194
MOUNTAINLAND TECHNICAL COLLEGE	N/A	2,165	9,461	(3,455)	731	873	703
MT OLYMPUS IMPROVEMENT DIST	N/A	288,500	1,761,240	(935,576)	97,813	182,737	52,021
MURRAY CITY	N/A	6,038,119	27,602,001	(11,736,817)	927,396	2,512,358	617,576
MURRAY SCHOOL DISTRICT	N/A	19,127,196	49,254,847	(5,970,160)	3,398,151	3,422,185	1,238,211
MYTON CITY	N/A	7,265	40,966	(20,348)	2,461	4,153	1,591
N TOOEE FIRE PROTECTION SD	N/A	13,178	101,938	(57,816)	6,059	12,885	7,358
N UT ENVIRONMENTAL RSRC AGCY	N/A	107,284	642,684	(336,269)	36,365	66,327	20,366
NEBO CREDIT UNION	N/A	187,448	1,126,426	(590,875)	63,539	116,354	35,289
NEBO SCHOOL DISTRICT	N/A	88,434,563	226,353,880	(26,336,353)	15,859,833	15,855,648	5,821,170
NEPHI CITY	N/A	609,759	2,900,637	(1,276,729)	114,770	273,295	74,240
NIBLEY CITY CORPORATION	N/A	126,562	754,219	(392,946)	42,896	77,722	24,353
NOAH WEBSTER ACADEMY INC	N/A	874,926	2,261,698	(276,528)	158,858	159,622	60,777
NORTH DAVIS CO SEWER DIST	N/A	539,278	3,233,693	(1,707,277)	157,575	318,466	82,622
NORTH DAVIS FIRE DISTRICT	N/A	38,313	281,009	(157,287)	16,485	34,226	17,862
NORTH EMERY WATER USERS SSD	N/A	13,042	70,236	(33,387)	4,415	7,016	3,132
NORTH FORK SSD	N/A	32,818	207,531	(111,975)	11,508	22,142	6,934
NORTH LOGAN CITY	N/A	165,142	945,896	(476,439)	55,943	96,341	34,957
NORTH OGDEN CITY	N/A	1,151,972	4,993,799	(2,001,741)	157,746	449,261	113,648
NORTH PARK POLICE AGENCY	N/A	344,771	1,210,887	(358,042)	12,766	95,992	20,550
NORTH POINTE SOLID WASTE	N/A	196,228	1,166,268	(606,289)	66,506	120,090	38,017
NORTH SANPETE SCHOOL DISTRICT	N/A	7,825,027	19,922,198	(2,253,998)	1,394,020	1,389,800	499,856
NORTH SUMMIT SCHOOL DISTRICT	N/A	4,156,115	10,559,083	(1,181,238)	738,463	735,418	262,312
NORTH VIEW FIRE DISTRICT	N/A	30,607	240,455	(136,749)	14,382	30,747	18,106
NORTHEASTERN COUNSELING CTR	N/A	459,343	2,745,698	(1,434,069)	155,693	283,188	87,693
NUAMES CHARTER SCHOOL	N/A	2,901,054	7,382,439	(833,120)	516,511	514,819	184,813
OAKLEY CITY	N/A	157,577	803,032	(388,368)	2,382	47,718	2,290
OGDEN CITY CORP	N/A	15,798,748	45,011,951	(8,266,541)	1,385,536	3,305,353	691,072
OGDEN SCHOOL DISTRICT	N/A	31,519,068	81,229,852	(9,784,433)	5,701,185	5,719,756	2,154,069
OGDEN-WEBER TECH COLLEGE	N/A	1,866,129	4,728,251	(521,161)	330,450	328,618	115,940
OQUIRRH REC AND PARKS DISTRICT	N/A	138,195	849,848	(454,032)	46,858	88,355	24,403
ORANGEVILLE CITY	N/A	16,391	98,246	(51,429)	5,556	10,141	3,107
ORDERVILLE TOWN	N/A	26,153	156,255	(81,582)	8,864	16,114	4,999
PANGUITCH CITY CORPORATION	N/A	57,146	340,590	(177,465)	19,368	35,099	10,992
PARK CITY	N/A	5,020,590	23,854,880	(10,465,881)	972,721	2,211,759	638,063
PARK CITY FIRE SERVICE	N/A	218,972	1,364,878	(715,221)	80,644	149,265	64,587
PARK CITY SCHOOL DISTRICT	N/A	21,631,968	55,530,454	(6,558,349)	3,893,657	3,898,494	1,447,090
PAROWAN CITY	N/A	351,807	1,615,635	(691,073)	56,469	149,177	35,349
PAYSON CITY	N/A	1,890,940	8,852,300	(3,847,800)	333,720	825,570	210,674
PERRY CITY	N/A	297,502	1,194,374	(436,682)	30,350	102,445	24,001
PIUTE COUNTY	N/A	190,673	814,619	(323,303)	23,890	72,109	15,525
PIUTE SCHOOL DISTRICT	N/A	1,394,546	3,586,678	(427,674)	251,608	252,165	94,262
PLAIN CITY	N/A	52,724	320,248	(169,439)	17,874	33,180	9,641
PLEASANT GROVE CITY	N/A	1,450,792	6,450,372	(2,657,460)	215,081	588,848	151,262
PLEASANT VIEW CITY	N/A	592,644	2,437,701	(921,408)	64,676	212,138	48,108
POWDER MOUNTAIN WATER & SEWER	N/A	49,155	281,387	(141,657)	16,652	28,655	10,418
PRICE CITY	N/A	874,052	4,035,603	(1,732,720)	143,977	374,286	92,161
PRICE RIVER WATER IMPROVE	N/A	206,491	1,254,525	(663,873)	70,004	129,987	37,738
PROVIDENCE CITY	N/A	153,063	926,433	(488,784)	51,889	95,891	28,264
PROVO CITY CORP	N/A	13,298,452	45,065,360	(12,895,717)	1,597,437	3,652,526	1,026,779
PROVO HOUSING AUTHORITY	N/A	218,428	1,249,376	(644,424)	45,315	109,737	24,222

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
2,881	85,348	276	—	276	5,998	6,550	43,567	(16,259)	—	27,308
278,006	1,040,869	4,509	—	289	5,707	10,505	669,879	213,607	—	883,486
11,784	204,732	952	—	636	9,697	11,285	113,246	11,766	—	125,012
24,095	445,466	3,306	—	1,410	31,772	36,488	343,199	32,657	—	375,856
339,325	3,570,698	10,889	—	698	13,463	25,050	2,601,105	388,625	—	2,989,730
3,841	29,363	165	—	77	16,147	16,389	17,787	(8,028)	—	9,759
14,680	212,147	1,221	—	636	6,350	8,207	145,667	(4,972)	—	140,695
1,493	10,032	145	—	25	3,077	3,247	8,796	6,163	—	14,959
15,000	375,892	2,014	—	1,183	13,183	16,380	220,414	(21,056)	—	199,358
39,237	652,649	2,923	—	1,997	11,302	16,222	410,856	136,770	—	547,626
42	2,349	86	—	6	—	92	4,108	4	—	4,112
5,702	338,273	1,170	—	1,109	20,074	22,353	177,783	(21,243)	—	156,540
83,774	4,141,104	47,920	—	20,723	238,228	306,871	3,446,471	(282,291)	—	3,164,180
180,360	8,238,907	22,508	—	1,443	251,644	275,595	6,503,488	122,600	—	6,626,088
538	8,743	99	—	25	5,674	5,798	6,972	(5,521)	—	1,451
6,649	32,951	3,679	—	1,119	576	5,374	49,041	1,812	—	50,853
11,956	135,014	687	—	403	2,895	3,985	75,165	11,679	—	86,844
14,278	229,460	1,128	—	707	1,264	3,099	128,730	16,567	—	145,297
1,959,562	39,496,213	112,886	—	7,238	137,248	257,372	29,823,512	1,601,545	—	31,425,057
26,442	488,747	5,053	—	2,124	6,517	13,694	346,357	(15,805)	—	330,552
6,896	151,867	891	—	473	5,221	6,585	91,583	(6,272)	—	85,311
55,837	435,094	1,589	—	102	2,827	4,518	314,249	48,252	—	362,501
7,744	566,407	1,594	—	1,797	22,367	25,758	437,581	(30,711)	—	406,870
4,703	73,276	8,123	—	2,497	2,993	13,613	113,585	509	—	114,094
1,676	16,239	246	—	43	411	700	14,963	1,209	—	16,172
2,506	43,090	955	—	383	605	1,943	28,462	3,346	—	31,808
23,900	211,141	1,948	—	588	6,774	9,310	147,716	(945)	—	146,771
45,187	765,842	10,224	—	3,870	12,152	26,246	602,967	36,599	—	639,566
31,921	161,229	5,017	—	1,506	5,471	11,994	169,375	4,662	—	174,037
7,877	232,490	1,446	—	731	7,171	9,348	144,293	(5,679)	—	138,614
303,484	3,587,160	7,730	—	496	8,760	16,986	2,547,159	184,038	—	2,731,197
47,415	1,783,608	3,634	—	233	36,980	40,847	1,333,732	(9,525)	—	1,324,207
11,881	75,116	9,264	—	2,809	3,510	15,583	122,274	(1,511)	—	120,763
39,498	566,072	3,063	—	1,722	4,416	9,201	326,240	35,757	—	361,997
180,034	1,396,177	2,791	—	179	4,244	7,214	941,296	273,811	—	1,215,107
1,861	54,251	280	—	18	571	869	339,791	(34,971)	—	304,820
182,749	5,564,710	96,196	—	34,089	64,479	194,764	6,089,397	(37,478)	—	6,051,919
245,177	13,820,187	52,004	—	3,334	266,779	322,117	11,107,533	(361,855)	—	10,745,678
62,106	837,114	1,359	—	87	158,631	160,077	587,770	(208,279)	—	379,491
6,391	166,007	433	—	536	5,372	6,341	80,588	(13,648)	—	66,940
904	19,708	104	—	62	1,415	1,581	11,441	(1,693)	—	9,748
3,702	33,679	176	—	98	150	424	18,625	3,727	—	22,352
4,934	70,393	402	—	214	453	1,069	41,320	4,363	—	45,683
373,106	4,195,649	31,415	—	11,335	80,760	123,510	3,296,090	1,959	—	3,298,049
45,148	339,644	16,797	—	5,131	14,974	36,902	344,371	20,336	—	364,707
166,733	9,405,974	31,051	—	1,991	674,802	707,844	7,434,781	(561,158)	—	6,873,623
15,771	256,766	1,631	—	959	8,512	11,102	163,547	8,927	—	172,474
86,962	1,456,926	10,328	—	5,238	9,240	24,806	967,997	101,673	—	1,069,670
7,862	164,658	1,814	—	649	8,488	10,951	140,210	(6,273)	—	133,937
2,914	114,438	240	—	266	8,522	9,028	77,015	(5,314)	—	71,701
52,577	650,612	2,146	—	138	10,276	12,560	485,158	4,024	—	489,182
1,799	62,494	247	—	202	3,873	4,322	33,686	(7,816)	—	25,870
39,632	994,823	14,402	—	5,558	62,318	82,278	781,274	(898)	—	780,376
24,053	348,975	3,376	—	1,404	7,531	12,311	268,949	28,246	—	297,195
5,345	61,070	583	—	175	477	1,235	44,091	12,577	—	56,668
17,042	627,466	5,683	—	2,800	25,870	34,353	433,933	(106,072)	—	327,861
4,310	242,039	962	—	790	12,169	13,921	131,721	(14,944)	—	116,777
16,818	192,862	785	—	582	1,094	2,461	100,220	21,809	—	122,029
139,380	6,416,122	1,163,892	—	28,239	137,524	1,329,655	4,561,224	(91,375)	—	4,469,849
7,444	186,718	572	—	513	5,195	6,280	267,273	71,338	—	338,611

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
PROVO RESER WATER USERS	N/A	\$ 4,960	31,259	(17,015)	1,682	3,272	813
PROVO RIVER WATER USERS	N/A	172,586	1,050,027	(556,281)	58,510	108,842	31,418
PROVO SCHOOL DISTRICT	N/A	38,426,670	99,083,322	(12,034,933)	6,888,588	6,929,312	2,560,979
RECREATION & HABILITATION SRVS	N/A	7,844	49,434	(26,907)	2,660	5,174	1,285
REDMOND TOWN	N/A	18,473	116,421	(63,368)	6,266	12,185	3,027
RICH COUNTY	N/A	325,025	1,380,187	(541,126)	41,397	122,399	29,693
RICH SCHOOL DISTRICT	N/A	2,400,138	6,098,891	(682,923)	426,553	424,833	151,636
RICHFIELD CITY	N/A	515,122	2,198,614	(868,824)	63,042	196,043	45,284
RICHMOND CITY	N/A	63,535	369,461	(188,568)	21,527	37,801	12,987
RIVERDALE CITY	N/A	1,273,814	5,139,968	(1,896,996)	125,030	442,588	97,149
ROOSEVELT CITY	N/A	671,636	2,829,876	(1,100,615)	82,196	249,614	58,699
ROOSEVELT CITY HOUSING	N/A	7,449	46,948	(25,554)	2,527	4,914	1,221
ROY CITY	N/A	2,143,429	8,995,833	(3,472,678)	250,456	798,209	197,642
ROY WATER CONSERV DIST	N/A	87,395	550,790	(299,797)	29,643	57,646	14,323
S UTAH VALLEY ELECTRIC SVC DST	N/A	215,026	1,309,189	(693,982)	72,900	135,733	39,064
S UTAH VALLEY SOLID WASTE	N/A	204,428	1,214,605	(631,247)	69,285	125,056	39,638
SALEM CITY	N/A	939,103	4,319,926	(1,843,549)	160,498	399,387	104,283
SALINA CITY	N/A	141,255	609,534	(243,058)	20,001	54,398	13,859
SALT LAKE ARTS ACADEMY	N/A	1,192,888	3,045,773	(349,871)	213,276	212,948	77,449
SALT LAKE CITY CORP	N/A	83,780,502	250,781,996	(54,099,201)	8,769,382	19,422,406	5,153,871
SALT LAKE CITY PUBLIC LIBRARY	N/A	1,103,423	6,626,309	(3,473,990)	374,023	684,334	208,103
SALT LAKE CO SERV AREA 3	N/A	33,224	201,067	(106,072)	11,263	20,811	6,137
SALT LAKE COMMUNITY COLLEGE	N/A	228,224	997,212	(364,184)	77,085	92,012	74,092
SALT LAKE COUNTY	N/A	45,287,037	221,064,116	(99,752,412)	9,004,444	20,967,314	5,587,553
SALT LAKE SCHOOL DISTRICT	N/A	84,801,673	219,546,173	(27,554,398)	14,933,058	15,139,370	5,400,680
SAN JUAN COUNTY	N/A	1,490,134	6,717,622	(2,812,312)	231,985	615,601	154,274
SAN JUAN MENTAL HEALTH	N/A	128,386	757,381	(391,293)	43,508	77,818	25,345
SAN JUAN SCHOOL DISTRICT	N/A	12,091,871	31,002,259	(3,645,998)	2,166,005	2,169,064	795,658
SAN RAFAEL SPECIAL SERV DIST	N/A	6,011	32,192	(15,217)	2,035	3,209	1,459
SANDY CITY	N/A	7,095,006	32,415,642	(13,779,105)	2,340,130	3,088,106	897,992
SANDY SUBURBAN IMP DIST	N/A	197,646	1,235,279	(668,175)	67,031	128,995	33,253
SANPETE COUNTY	N/A	1,673,724	6,627,165	(2,385,284)	152,274	563,252	121,535
SANTAQUIN CITY	N/A	784,724	3,364,175	(1,333,772)	102,930	300,049	72,942
SEVEN COUNTY INFRASTRUCTURE	N/A	17,982	113,328	(61,685)	6,099	11,861	2,947
SEVIER COUNTY	N/A	2,099,531	8,264,492	(2,948,665)	188,088	699,871	152,920
SEVIER SCHOOL DISTRICT	N/A	13,710,552	34,916,272	(3,956,328)	2,443,376	2,436,334	877,215
SIX-COUNTY ASSOC OF GOVT	N/A	184,409	1,112,290	(585,213)	62,512	115,015	34,374
SLC MOSQUITO ABATEMENT	N/A	114,123	675,604	(350,064)	38,677	69,487	22,333
SMITHFIELD CITY CORP	N/A	644,452	2,866,222	(1,183,617)	94,171	261,187	64,180
SNOW COLLEGE	N/A	75,500	300,907	(104,943)	12,516	26,521	10,050
SNYDERVILLE BASIN SRD	N/A	230,432	1,318,643	(663,642)	78,061	134,268	48,878
SNYDERVILLE BASIN W R D	N/A	569,593	3,514,527	(1,882,506)	193,142	365,727	99,606
SO DAVIS METRO FIRE AGENCY	N/A	96,038	717,991	(403,302)	42,476	88,822	48,567
SO DAVIS RECREATION CENTER	N/A	125,545	738,103	(380,242)	42,544	75,762	24,994
SO SL VALLEY MOSQ ABATE	N/A	44,007	266,187	(140,369)	14,918	27,546	8,140
SO UTAH VALLEY ANIMAL SVCS SSD	N/A	25,999	153,265	(79,135)	8,811	15,744	5,142
SO UTAH VALLEY POWER SYSTEMS	N/A	30,800	181,780	(93,951)	10,438	18,680	6,073
SOLDIER HOLLOW CHARTER SCHOOL	N/A	649,416	1,689,192	(212,741)	118,827	119,771	46,604
SOLID WASTE SSD #1	N/A	203,534	1,166,351	(587,727)	68,950	118,811	43,036
SOUTH DAVIS SEWER DIST	N/A	699,890	3,990,784	(2,054,069)	143,306	348,818	77,199
SOUTH DAVIS WATER DIST	N/A	59,009	366,795	(197,581)	20,011	38,246	10,095
SOUTH OGDEN CITY	N/A	1,306,945	5,293,121	(1,961,088)	129,349	457,879	102,796
SOUTH OGDEN CONSERV DIST	N/A	267,372	1,615,588	(851,240)	90,638	167,143	49,597
SOUTH SANPETE SCHOOL DISTRICT	N/A	9,102,033	23,232,752	(2,664,400)	1,626,712	1,623,950	589,917
SOUTH SUMMIT SCHOOL DISTRICT	N/A	5,931,030	15,059,832	(1,679,513)	1,053,076	1,048,419	373,101
SOUTH VALLEY SEWER DISTRICT	N/A	548,208	3,279,046	(1,713,559)	185,815	338,260	104,478
SOUTH VALLEY WATER RECLAMATION	N/A	542,519	3,326,254	(1,772,882)	183,947	345,528	96,637
SOUTH WEBER CITY	N/A	120,664	701,929	(358,363)	40,884	71,825	24,643
SOUTHEASTERN UTAH AOG	N/A	199,743	1,156,781	(588,316)	67,674	118,211	41,224
SOUTHEASTERN UTAH HEALTH	N/A	276,907	1,598,185	(810,392)	93,815	163,151	57,605

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
417	6,184	—	—	20	—	20	2,333	2,342	—	4,675
7,968	206,738	773	—	661	6,260	7,694	108,994	520	—	109,514
988,694	17,367,573	55,086	—	3,532	547,653	606,271	13,353,451	178,501	—	13,531,952
53	9,172	—	—	31	392	423	3,690	(478)	—	3,212
1,202	22,680	—	—	74	1,067	1,141	8,691	(701)	—	7,990
11,907	205,396	2,034	—	818	7,503	10,355	158,376	(1,410)	—	156,966
41,983	1,045,005	2,121	—	136	11,727	13,984	771,142	(18,293)	—	752,849
8,124	312,493	4,195	—	1,760	43,092	49,047	244,060	(71,325)	—	172,735
2,907	75,222	635	—	231	970	1,836	52,733	1,101	—	53,834
15,129	679,896	8,130	—	3,281	24,519	35,930	566,779	(26,533)	—	540,246
60,149	450,658	3,594	—	1,537	23,183	28,314	313,924	(3,543)	—	310,381
232	8,894	—	—	30	—	30	3,505	288	—	3,793
102,533	1,348,840	26,356	—	9,372	54,053	89,781	1,137,581	(74,254)	—	1,063,327
2,711	104,323	—	—	349	—	349	41,116	7,654	—	48,770
14,158	261,855	944	—	825	1,469	3,238	135,089	20,284	—	155,373
15,639	249,618	1,514	—	761	2,230	4,505	150,617	5,912	—	156,529
98,184	762,352	5,277	—	2,397	3,868	11,542	493,725	81,338	—	575,063
3,214	91,472	599	—	244	14,246	15,089	70,825	(8,407)	—	62,418
28,897	532,570	1,364	—	87	4,545	5,996	395,824	64,330	—	460,154
684,764	34,030,423	455,477	—	126,362	311,058	892,897	27,434,981	(252,692)	—	27,182,289
52,572	1,319,032	6,729	—	4,160	7,941	18,830	761,055	77,474	—	838,529
2,262	40,473	171	—	126	161	458	21,774	550	—	22,324
26,209	269,398	9,055	—	581	15,013	24,649	432,923	3,902	—	436,825
866,395	36,425,706	305,952	—	146,772	835,721	1,288,445	25,743,141	(341,397)	—	25,401,744
474,968	35,948,076	91,370	—	5,858	1,041,968	1,139,196	29,020,110	(947,601)	—	28,072,509
30,177	1,032,037	10,055	—	4,464	85,348	99,867	756,178	(82,452)	—	673,726
5,946	152,617	1,062	—	474	7,307	8,843	98,592	(5,335)	—	93,257
247,563	5,378,290	15,538	—	996	211,951	228,485	4,098,019	(277,777)	—	3,820,242
1,099	7,802	117	—	19	—	136	7,029	564	—	7,593
208,829	6,535,057	68,083	—	58,005	100,424	226,512	5,505,850	47,509	—	5,553,359
2,710	231,989	213	—	782	10,830	11,825	100,624	414	—	101,038
32,715	869,776	9,066	—	3,616	30,519	43,201	726,949	102,242	—	829,191
38,221	514,142	5,131	—	2,099	6,420	13,650	384,361	25,671	—	410,032
6,106	27,013	—	—	72	—	72	8,460	3,277	—	11,737
24,960	1,065,839	11,696	—	4,450	12,326	28,472	925,016	15,465	—	940,481
207,334	5,964,259	13,751	—	882	22,813	37,446	4,471,401	(29,960)	—	4,441,441
9,372	221,273	1,025	—	699	1,762	3,486	123,593	717	—	124,310
8,725	139,222	896	—	423	1,020	2,339	85,897	3,540	—	89,437
48,009	467,547	5,110	—	2,183	9,271	16,564	324,181	73,472	—	397,653
8,297	57,384	1,109	—	71	3,421	4,601	68,102	2,580	—	70,682
16,360	277,567	2,743	—	820	18,309	21,872	207,021	(4,393)	—	202,628
15,935	674,410	1,544	—	2,218	5,389	9,151	323,494	12,210	—	335,704
17,129	196,994	23,041	—	7,032	17,467	47,540	315,989	1,086	—	317,075
6,614	149,914	1,091	—	462	6,616	8,169	98,272	4,990	—	103,262
1,643	52,247	229	—	168	2,101	2,498	28,938	831	—	29,769
2,221	31,918	217	—	96	155	468	20,047	1,236	—	21,283
5,475	40,666	253	—	114	40,666	718	23,590	3,058	—	26,648
31,700	316,902	1,401	—	90	5,483	6,974	242,250	29,935	—	272,185
71,522	302,319	2,389	—	725	2,982	6,096	181,647	60,360	—	242,007
37,356	606,679	1,955	—	1,616	3,543	7,114	870,238	3,551	—	873,789
1,837	70,189	105	—	232	376	713	31,526	(1,691)	—	29,835
30,943	720,967	10,827	—	4,130	46,187	61,144	607,095	(28,866)	—	578,229
16,947	324,325	1,426	—	1,015	1,880	4,321	177,062	11,892	—	188,954
51,346	3,891,925	10,251	—	657	328,322	339,230	3,013,986	(349,918)	—	2,664,068
229,740	2,704,336	5,003	—	321	7,522	12,846	1,895,884	196,699	—	2,092,583
17,683	646,236	3,612	—	2,058	40,687	46,357	387,757	(23,075)	—	364,682
15,929	642,041	1,907	—	2,096	3,207	7,210	323,784	15,001	—	338,785
12,686	150,038	1,201	—	438	1,151	2,790	99,964	7,793	—	107,757
18,148	245,257	2,095	—	721	2,004	4,820	169,295	17,471	—	186,766
31,596	346,167	3,017	—	995	3,204	7,216	238,738	29,617	—	268,355

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
SOUTHERN UTAH UNIVERSITY	N/A	\$ 9,137,626	23,844,956	(3,080,986)	1,632,639	1,683,789	619,618
SOUTHWEST EDUC DEVELOPMENT CTR	N/A	319,615	825,707	(100,657)	57,988	58,248	22,130
SOUTHWEST TECHNICAL COLLEGE	N/A	1,473,973	3,876,288	(513,225)	273,407	277,082	111,833
SPANISH FORK CITY	N/A	3,479,884	16,534,815	(7,277,361)	649,059	1,555,243	413,430
SPRING CITY	N/A	67,543	322,404	(143,385)	12,092	30,238	6,949
SPRINGVILLE CITY	N/A	2,467,524	12,405,841	(5,735,355)	537,058	1,198,586	330,017
ST GEORGE HOUSING AUTH	N/A	26,378	160,017	(84,577)	8,942	16,574	4,841
STANSBURY PARK IMPROV DIST	N/A	78,070	483,433	(259,656)	26,474	50,356	13,509
STANSBURY SERVICE AGENCY	N/A	76,436	420,499	(204,088)	25,881	42,295	17,619
STATE OF UTAH	N/A	653,454,103	1,767,666,182	(272,038,885)	108,839,517	127,755,521	40,665,366
STATEWIDE ASSOC PUBLIC ATTYS	N/A	11,081	69,838	(38,013)	3,759	7,309	1,816
STOCKTON TOWN	N/A	57,886	186,421	(46,644)	256	13,417	1,553
SUCCESS ACADEMY	N/A	922,958	2,368,230	(279,066)	166,036	166,205	61,592
SUMMIT ACADEMY HIGH SCHOOL	N/A	856,911	2,297,394	(329,829)	162,788	166,511	71,289
SUMMIT ACADEMY INC	N/A	3,892,253	10,217,232	(1,341,835)	720,336	729,365	292,639
SUMMIT COUNTY	N/A	6,674,083	28,368,026	(11,152,843)	841,278	2,513,346	587,526
SUMMIT COUNTY SERVICE AREA 3	N/A	11,344	61,155	(29,100)	3,840	6,111	2,719
SUNSET CITY	N/A	357,274	1,422,811	(515,413)	34,012	121,464	27,230
SW BEHAVIORAL HEALTH CENTER	N/A	1,326,189	7,921,849	(4,135,267)	449,502	816,890	253,627
SW MOSQUITO ABATEMENT/CONTROL	N/A	28,805	168,947	(86,861)	9,761	17,329	5,768
SW UT PUBLIC HEALTH DEPT	N/A	431,566	2,566,643	(1,334,992)	146,268	264,335	83,473
SYRACUSE CITY CORP	N/A	1,561,684	6,654,447	(2,612,937)	201,273	594,023	151,981
TAYLOR WEST WEBER WTR IMP DIST	N/A	29,206	165,686	(82,741)	9,893	16,826	6,316
TAYLORSVILLE-BENNION IMP	N/A	393,058	2,402,298	(1,277,260)	133,265	249,329	70,645
TIMBERLAKES WATER SSD	N/A	48,948	282,476	(143,221)	16,583	28,835	10,186
TIMPANOGOS SSD	N/A	370,517	2,228,156	(1,169,486)	125,595	230,205	69,619
TINTIC SCHOOL DISTRICT	N/A	1,217,335	3,094,251	(347,044)	216,426	215,588	77,042
TOOELE CITY	N/A	2,250,743	9,790,639	(3,938,378)	311,375	883,147	225,198
TOOELE COUNTY	N/A	3,646,461	16,820,223	(7,189,795)	629,199	1,560,184	417,089
TOOELE COUNTY HOUSING	N/A	56,136	336,518	(176,176)	19,028	34,736	10,637
TOOELE SCHOOL DISTRICT	N/A	43,137,385	110,518,149	(12,922,071)	7,745,463	7,747,228	2,854,556
TOOELE TECHNICAL COLLEGE	N/A	1,000,867	2,561,476	(297,845)	179,469	179,410	65,838
TOOELE VALLEY MOSQUITO ABTMNT	N/A	5,139	32,386	(17,628)	1,743	3,390	842
TOQUERVILLE CITY	N/A	48,727	264,761	(126,972)	16,496	26,524	11,507
TORREY TOWN	N/A	4,180	22,592	(10,780)	1,415	2,260	996
TOWN OF ALTA	N/A	85,463	517,002	(272,654)	28,972	53,504	15,804
TOWN OF APPLE VALLEY	N/A	8,410	46,237	(22,243)	2,902	4,707	2,173
TOWN OF BRIAN HEAD	N/A	375,124	1,536,176	(578,121)	39,928	133,131	29,260
TOWN OF DANIEL	N/A	9,338	56,047	(29,370)	3,165	5,787	1,763
TOWN OF GARDEN CITY	N/A	58,731	339,516	(172,401)	19,899	34,677	12,173
TOWN OF GOSHEN	N/A	8,513	47,068	(22,955)	2,882	4,742	1,942
TOWN OF HIDEOUT	N/A	74,316	448,941	(236,495)	25,192	46,443	13,795
TOWN OF LEVAN	N/A	25,756	162,323	(88,353)	8,736	16,989	4,221
TOWN OF MANILA	N/A	18,698	107,686	(54,503)	6,334	10,986	3,908
TOWN OF MANTUA	N/A	48,674	226,962	(98,346)	16,829	22,262	6,495
TOWN OF PARAGONAH	N/A	47,065	240,110	(116,309)	596	14,216	572
TOWN OF RANDOLPH	N/A	7,121	44,738	(24,294)	2,416	4,679	1,179
TOWN OF SPRINGDALE	N/A	752,910	2,972,008	(1,066,218)	70,005	250,896	53,085
TRANS-JORDAN CITIES	N/A	333,109	1,997,897	(1,046,379)	112,911	206,260	63,032
TREMONTON CITY	N/A	631,589	2,847,641	(1,192,296)	95,626	261,850	65,328
TRICOUNTY HEALTH DEPT	N/A	222,776	1,309,641	(674,634)	75,493	134,425	44,359
TRIDELL-LAPOINT WATER	N/A	13,337	71,807	(34,127)	4,515	7,172	3,204
UINTAH ANIMAL CONTROL/SHELTER	N/A	30,174	180,195	(94,043)	10,227	18,580	5,774
UINTAH BASIN ASSN OF GOVT	N/A	245,958	1,428,628	(728,420)	83,336	146,119	50,414
UINTAH BASIN ASST COUNCIL	N/A	10,288	62,651	(33,215)	3,488	6,496	1,868
UINTAH BASIN TECHNICAL COLLEGE	N/A	2,700,555	6,986,065	(857,183)	490,778	493,321	188,320
UINTAH CO CARE CENTER SSD	N/A	295,322	1,740,517	(898,499)	100,080	178,784	58,438
UINTAH COUNTY	N/A	3,148,894	13,532,457	(5,370,548)	421,150	1,211,074	306,382
UINTAH FIRE SUPPRESSION SSD	N/A	7,125	46,799	(25,707)	2,577	5,121	1,690
UINTAH HIGHLANDS IMPROV DIST	N/A	23,407	147,516	(80,294)	7,939	15,439	3,836

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Nonemployer Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
93,541	4,029,587	16,609	—	1,449	245,494	263,552	3,273,441	(59,505)	—	3,213,936
20,314	158,680	570	—	37	2,844	3,451	114,364	6,015	—	120,379
97,574	759,896	4,079	—	262	4,494	8,835	586,324	69,738	—	656,062
130,627	2,748,359	24,390	—	11,047	105,344	140,781	1,902,568	96,412	—	1,998,980
21,700	70,979	76	—	138	2,091	2,305	28,861	21,419	—	50,280
112,099	2,177,760	20,308	—	9,418	39,924	69,650	1,438,225	(17,043)	—	1,421,182
1,039	31,396	128	—	100	1,726	1,954	17,005	(2,751)	—	14,254
3,813	94,152	176	—	305	94	575	43,068	14,344	—	57,412
18,648	104,443	1,257	—	260	2,115	3,632	81,149	11,487	—	92,636
9,725,141	286,985,545	1,303,482	—	216,063	7,475,779	8,995,324	230,042,944	(7,356,605)	(1,335,491)	221,350,848
365	13,249	—	—	44	407	451	5,213	5,077	—	10,290
8,050	23,276	—	—	—	428	428	17,105	9,405	—	26,510
25,182	419,015	1,303	—	84	1,763	3,150	316,308	47,811	—	364,119
22,222	422,810	3,302	—	212	60,332	63,846	378,671	3,398	—	382,069
59,589	1,801,929	10,374	—	665	77,179	88,218	1,532,159	12,203	—	1,544,362
163,356	4,105,506	32,216	—	14,739	77,405	124,360	3,079,534	(40,708)	—	3,038,826
4,482	17,152	212	—	38	155	405	12,968	3,276	—	16,244
30,664	213,370	2,199	—	826	4,535	7,560	161,957	18,937	—	180,894
64,577	1,584,596	8,954	—	4,968	17,360	31,282	945,859	(13,735)	—	932,124
2,402	35,260	258	—	106	3,277	3,641	22,844	(1,154)	—	21,690
20,759	514,835	3,145	—	1,609	5,300	10,054	316,118	4,992	—	321,110
97,009	1,044,286	16,227	—	5,755	4,848	26,830	839,067	99,941	—	939,008
2,571	35,606	377	—	103	1,481	1,961	27,307	(5,536)	—	21,771
17,178	470,417	1,537	—	1,514	2,002	5,053	240,181	12,365	—	252,546
3,501	59,105	534	—	176	2,307	3,017	42,223	(5,174)	—	37,049
12,151	437,570	2,196	—	1,400	12,974	16,570	253,249	8,441	—	261,690
5,158	514,214	1,096	—	70	8,001	9,167	391,923	(9,458)	—	382,465
122,660	1,542,380	21,597	—	8,078	13,453	43,128	1,196,956	136,261	—	1,333,217
92,816	2,699,288	27,550	—	11,279	98,394	137,223	2,009,368	(118,497)	—	1,890,871
10,118	74,519	355	—	211	2,196	2,762	39,155	2,272	—	41,427
1,696,837	20,044,084	57,298	—	3,674	66,533	127,505	14,638,293	1,470,294	—	16,108,587
23,927	448,644	1,271	—	81	24,236	25,588	337,267	23,570	—	360,837
226	6,201	—	—	21	—	21	2,418	607	—	3,025
6,660	61,187	869	—	163	1,440	2,472	54,164	1,808	—	55,972
272	4,943	77	—	14	552	643	4,732	(278)	—	4,454
5,078	103,358	444	—	325	1,942	2,711	56,159	2,103	—	58,262
2,464	12,246	278	—	65	3,845	4,188	10,896	(2,651)	—	8,245
14,813	217,132	1,649	—	757	6,651	9,057	162,621	21,722	—	184,343
150	10,865	58	—	35	1,800	1,893	6,465	(108)	—	6,357
6,754	73,503	629	—	211	1,777	2,617	50,231	6,295	—	56,526
968	10,534	135	—	29	1,713	1,877	8,862	(1,219)	—	7,643
31,425	116,855	399	—	283	174	856	49,299	21,687	—	70,986
927	30,873	—	—	103	—	103	12,117	1,084	—	13,201
3,998	25,226	208	—	67	402	677	16,289	40,567	—	56,856
5,109	50,695	466	—	412	2,455	3,333	33,358	2,372	—	35,730
384	15,768	70	—	4	101	175	101,582	(6,083)	—	95,499
209	8,483	3	—	28	734	765	3,455	(114)	—	3,341
61,727	435,713	1,375	—	745	1,622	3,742	306,795	67,429	—	374,224
25,407	407,610	2,083	—	1,255	5,429	8,767	231,599	(1,710)	—	229,889
18,994	441,798	6,172	—	2,554	24,477	33,203	329,485	(26,988)	—	302,497
132,805	387,082	1,937	—	819	2,138	4,894	174,452	107,018	—	281,470
996	15,887	251	—	44	600	895	15,311	454	—	15,765
769	35,350	205	—	113	8,721	9,039	21,557	(12,226)	—	9,331
17,583	297,452	2,494	—	891	6,723	10,108	205,369	14,213	—	219,582
1,026	12,878	45	—	40	477	562	6,456	600	—	7,056
164,938	1,337,357	5,013	—	321	6,124	11,458	974,348	103,100	—	1,077,448
10,640	347,942	2,478	—	1,089	65,175	68,742	228,016	(89,753)	—	138,263
66,685	2,005,291	26,708	—	9,949	274,346	311,003	1,640,725	(261,125)	—	1,379,600
297	9,685	370	—	136	319	825	7,655	41	—	7,696
3,471	30,685	—	—	93	964	1,057	11,012	7,470	—	18,482

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Continued)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
UINTAH MOSQUITO ABATE DISTRICT	N/A	\$ 29,419	185,408	(100,918)	9,978	19,405	4,821
UINTAH RECREATION DISTRICT	N/A	126,598	760,888	(399,184)	42,913	78,600	23,823
UINTAH SCHOOL DISTRICT	N/A	18,701,091	48,737,435	(6,317,708)	3,311,057	3,370,675	1,225,822
UINTAH TRANSPORTATION SSD	N/A	4,827	30,421	(16,558)	1,637	3,184	791
UINTAH WATER CONSERV DIST	N/A	74,582	447,202	(234,165)	25,280	46,165	14,122
UNIFIED FIRE AUTHORITY	N/A	813,169	5,186,422	(2,766,935)	283,711	575,307	230,550
UNIFIED POLICE DEPARTMENT	N/A	13,251,853	46,458,879	(13,860,613)	4,593,521	4,120,709	1,150,509
UNIVERSITY OF UTAH	N/A	3,129,368	12,511,347	(4,395,598)	500,373	1,108,040	399,645
UNIVERSITY OF UTAH HOSPITAL	N/A	84,194	367,881	(134,351)	28,438	33,944	27,333
UPPER COUNTRY WATER DIST	N/A	14,053	86,353	(46,107)	4,764	8,976	2,487
USU SPACE DYNAMICS LAB	N/A	35,133	153,513	(56,063)	11,867	14,165	11,406
UT MUNICIPAL POWER AGENCY	N/A	416,417	2,551,293	(1,359,077)	141,188	264,973	74,326
UT PUBLIC EMPLOYEES ASSN	N/A	22,244	140,189	(76,305)	7,545	14,672	3,645
UTAH ARTS ACADEMY	N/A	624,757	1,627,337	(206,302)	114,515	115,506	45,162
UTAH ASSOCIATION OF COUNTIES	N/A	90,072	529,737	(272,981)	30,523	54,381	17,917
UTAH CO ACADEMY OF SCIENCES	N/A	1,133,649	2,940,021	(365,127)	206,667	208,002	80,110
UTAH CO HOUSING AUTHORITY	N/A	140,180	834,561	(434,456)	47,511	85,976	27,040
UTAH COMMUNICATIONS AUTHORITY	N/A	1,464,735	3,754,840	(440,335)	263,189	263,328	97,238
UTAH COUNTIES INDEMNITY POOL	N/A	78,229	491,933	(267,320)	26,533	51,455	12,911
UTAH COUNTY	N/A	16,244,330	72,075,664	(29,701,373)	5,581,685	6,924,598	2,042,303
UTAH EDUCATION ASSOCIATION	N/A	1,159,393	2,921,234	(312,067)	203,872	202,142	69,695
UTAH HOUSING CORPORATION	N/A	4,642,409	13,705,131	(2,966,650)	726,005	856,561	276,239
UTAH LAKE COMMISSION	N/A	4,020	24,424	(12,925)	1,363	2,531	735
UTAH LAKE DISTRIBUTING CO	N/A	7,117	44,855	(24,415)	2,414	4,695	1,166
UTAH LEAGUE CITIES/TOWNS	N/A	569,257	2,915,457	(1,420,286)	2,188	170,388	2,103
UTAH LOCAL GOVERNMENTS TRUST	N/A	234,406	1,461,197	(788,813)	79,495	152,480	39,755
UTAH RETIREMENT SYSTEMS	N/A	19,145,493	48,774,390	(5,536,910)	3,413,441	3,404,227	1,227,395
UTAH SAFETY COUNCIL	N/A	218,115	567,180	(71,339)	39,896	40,207	15,630
UTAH SCHOOL BOARD ASSOCIATION	N/A	514,219	1,310,348	(148,959)	91,710	91,475	33,016
UTAH SCHOOL BOARD RISK MGMT	N/A	648,305	1,645,703	(183,263)	115,070	114,545	40,718
UTAH SCHOOL EMPLOYEES ASSN	N/A	250,198	648,020	(79,978)	45,538	45,802	17,560
UTAH STATE FAIR CORP	N/A	359,627	929,084	(113,263)	65,247	65,542	24,901
UTAH STATE UNIVERSITY	N/A	679,566	2,803,449	(1,002,971)	144,409	252,602	126,894
UTAH TECH UNIVERSITY	N/A	293,913	1,174,740	(416,021)	41,970	104,493	32,421
UTAH VALLEY UNIVERSITY	N/A	302,796	1,323,051	(483,182)	102,273	122,077	98,302
UTAH ZOOLOGICAL SOCIETY	N/A	741,330	4,353,751	(2,240,865)	251,214	446,751	147,973
UTOPIA	N/A	845,228	4,922,126	(2,515,243)	286,391	503,816	172,189
VALLEY EMERGENCY COMM CTR	N/A	1,232,404	7,274,456	(3,760,083)	417,651	747,555	242,942
VERNAL CITY	N/A	876,114	3,785,235	(1,514,644)	115,627	339,577	81,851
VINEYARD TOWN	N/A	251,866	1,487,371	(769,103)	85,356	152,869	49,593
WASATCH BEHAVIORAL HEALTH	N/A	3,732,897	22,472,821	(11,805,633)	1,265,369	2,322,531	699,365
WASATCH COUNTY	N/A	4,229,813	18,204,646	(7,245,905)	570,326	1,626,356	401,615
WASATCH COUNTY FIRE DISTRICT	N/A	58,756	400,596	(215,592)	24,313	47,448	25,857
WASATCH FRONT REGIONAL COUNCIL	N/A	362,802	2,189,218	(1,152,212)	122,985	226,401	67,549
WASATCH FRONT WASTE/RECYCLING	N/A	717,592	4,242,223	(2,195,576)	243,190	436,145	140,915
WASATCH INTEGRATED WASTE MGMT	N/A	478,496	2,801,881	(1,438,526)	162,141	287,260	96,198
WASATCH SCHOOL DISTRICT	N/A	25,505,239	65,434,822	(7,705,009)	4,587,456	4,591,766	1,700,687
WASATCH UNISERV	N/A	104,500	261,188	(26,612)	18,191	17,958	5,980
WASHINGTON CITY	N/A	1,990,005	9,796,813	(4,437,546)	413,343	941,170	270,322
WASHINGTON CO SOLID WASTE	N/A	99,996	584,646	(299,779)	33,883	59,914	20,177
WASHINGTON CO WAT CON DIST	N/A	407,992	2,469,992	(1,303,405)	138,311	255,674	75,290
WASHINGTON COUNTY	N/A	6,600,081	27,415,604	(10,481,581)	753,310	2,401,654	557,731
WASHINGTON SCHOOL DISTRICT	N/A	82,895,586	213,260,768	(25,608,999)	14,822,477	14,891,624	5,460,249
WASTE MANAGEMENT SERV DIST #5	N/A	25,599	157,415	(84,093)	8,680	16,365	4,522
WAYNE COUNTY	N/A	280,967	1,300,148	(558,004)	49,508	120,394	31,702
WAYNE SCHOOL DISTRICT	N/A	1,520,390	3,899,937	(458,807)	273,402	273,634	101,281
WEBER AREA DISPATCH 911	N/A	1,904,484	6,437,334	(1,777,493)	42,024	489,994	84,749
WEBER BASIN WATER CONSERV	N/A	929,051	5,650,166	(2,992,393)	314,969	585,610	169,311
WEBER CO MOSQUITO ABATE	N/A	89,129	546,140	(290,958)	30,220	56,723	15,903
WEBER COUNTY CORP	N/A	11,934,691	51,526,916	(20,539,414)	1,661,258	4,617,974	1,195,766

Utah Retirement Systems

Deferred Outflows of Resources		Deferred Inflows of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Nonemployer Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Contributions	Proportionate Share of Nonemployer Contributions	
1,081	35,285	—	—	117	681	798	13,840	(398)	—	13,442
2,436	147,772	759	—	478	35,178	36,415	86,843	(33,652)	—	53,191
271,074	8,178,628	25,524	—	1,637	556,014	583,175	6,641,000	122,651	—	6,763,651
1,742	7,354	—	—	19	10,791	10,810	2,271	(13,484)	—	(11,213)
3,182	88,749	469	—	281	12,105	12,855	51,945	(17,106)	—	34,839
110,383	1,199,951	71,732	—	23,164	67,312	162,208	1,252,456	(13,210)	—	1,239,246
34,753	9,899,492	61,733	—	121,395	411,950	595,078	8,540,390	(670,307)	—	7,870,083
320,151	2,328,209	49,883	—	5,112	220,653	275,648	2,755,130	172,910	—	2,928,040
12,287	102,002	3,340	—	214	1,296	4,850	159,710	1,173	—	160,883
834	17,061	45	—	55	7,959	8,059	8,242	(4,688)	—	3,554
4,374	41,812	1,394	—	89	1,154	2,637	66,645	(389,819)	—	(323,174)
12,120	492,607	1,501	—	1,608	16,714	19,823	249,860	6,236	—	256,096
1,018	26,880	—	—	89	4,136	4,225	10,465	(1,386)	—	9,079
10,123	285,306	1,396	—	90	99,721	101,207	235,021	(39,518)	—	195,503
7,976	110,797	779	—	331	11,583	12,693	70,367	(10,547)	—	59,820
36,550	531,329	2,261	—	145	9,138	11,544	415,379	25,880	—	441,259
8,498	169,025	1,004	—	523	3,158	4,685	102,038	(11,491)	—	90,547
20,380	644,135	1,992	—	128	89,677	91,797	498,926	(74,604)	—	424,322
2,360	93,259	22	—	311	423	756	37,608	5,080	—	42,688
298,411	14,846,997	100,745	—	120,951	271,254	492,950	10,981,460	147,722	—	11,129,182
35,447	511,156	498	—	32	7,585	8,115	351,087	44,829	—	395,916
46,519	1,905,324	6,982	—	448	12,806	20,236	2,205,801	44,359	—	2,250,160
584	5,213	19	—	15	324	358	2,563	287	—	2,850
1,197	9,472	—	—	28	—	28	3,348	2,765	—	6,113
1,299	175,978	257	—	16	577	850	1,232,679	(182,861)	—	1,049,818
14,667	286,397	331	—	924	10,516	11,771	122,165	8,444	—	130,609
175,426	8,220,489	19,565	—	1,254	367,024	387,843	6,258,633	(251,227)	—	6,007,406
2,429	98,162	467	—	30	26,701	27,198	81,227	(15,098)	—	66,129
17,753	233,954	533	—	34	28,121	28,688	168,394	(30,648)	—	137,746
26,410	296,743	537	—	34	8,188	8,759	206,848	(1,866)	—	204,982
17,547	126,447	481	—	31	8,116	8,628	90,946	(10,163)	—	80,783
13,781	169,471	641	—	41	10,168	10,850	128,687	503	—	129,190
63,014	586,919	16,573	—	1,638	30,935	49,146	808,331	36,304	—	844,635
21,297	200,181	4,846	—	749	11,590	17,185	234,946	29,923	—	264,869
41,431	364,083	12,014	—	770	20,968	33,752	574,380	5,723	—	580,103
31,642	877,580	6,535	—	2,722	68,041	77,298	583,714	(151,083)	—	432,631
104,413	1,066,809	8,309	—	3,072	8,541	19,922	696,375	113,567	—	809,942
51,624	1,459,772	10,111	—	4,552	23,864	38,527	943,308	64,223	—	1,007,531
10,261	547,316	6,820	—	2,802	57,549	67,171	431,320	(150,310)	—	281,010
36,018	323,836	2,052	—	931	3,319	6,302	192,274	41,360	—	233,634
437,984	4,725,249	21,618	—	14,116	20,013	55,747	2,533,398	444,273	—	2,977,671
119,207	2,717,504	26,111	—	10,611	34,353	71,075	2,096,948	126,170	—	2,223,118
17,406	115,024	10,641	—	3,173	5,701	19,515	162,534	8,701	—	171,235
6,639	423,574	1,997	—	1,376	12,170	15,543	242,476	(16,410)	—	226,066
57,132	877,382	5,753	—	2,655	6,858	15,266	544,445	52,858	—	597,303
87,560	633,159	4,388	—	1,750	7,181	13,319	382,869	67,731	—	450,600
1,297,007	12,176,916	35,794	—	2,295	41,470	79,559	8,732,796	1,152,246	—	9,885,042
1,462	43,591	—	—	—	486	486	29,823	2,863	—	32,686
106,235	1,731,070	24,655	—	9,485	14,226	48,366	1,261,762	123,016	—	1,384,778
5,327	119,301	935	—	365	13,096	14,396	80,667	(8,135)	—	72,532
15,786	485,061	2,080	—	1,553	4,069	7,702	266,711	11,894	—	278,605
95,448	3,808,143	42,484	—	17,142	245,143	304,769	3,089,050	(236,831)	—	2,852,219
2,166,537	37,340,887	109,185	—	7,001	135,280	251,466	28,404,232	1,473,282	—	29,877,514
2,869	32,436	81	—	99	368	548	14,939	(384)	—	14,555
11,407	213,011	1,231	—	599	19,882	21,712	147,318	(6,539)	—	140,779
9,151	657,468	2,119	—	136	129,029	131,284	519,975	(76,462)	—	443,513
445,664	1,062,431	15,059	—	4,543	340,929	360,531	763,573	764,965	—	1,528,538
40,241	1,110,131	4,209	—	3,556	45,281	53,046	588,389	14,129	—	602,518
4,623	107,469	320	—	345	285	950	53,430	409	—	53,839
271,834	7,746,832	91,428	—	33,427	391,933	516,788	6,314,285	(929,560)	—	5,384,725

Aggregation of Funds with a Net Pension Liability

(Employer's Collective Net Pension Asset for All Participating Retirement Systems)

Schedule of Employer Allocations and Pension Amounts *(Concluded)*

At December 31, 2022

Participating Employer	Employer Allocation Percentage	Net Pension Liability/(Asset) (6.85 Discount)	Net Pension Liability/(Asset) 1.00 Decrease (5.85)	Net Pension Liability/(Asset) 1.00 Decrease (7.85)	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions
WEBER COUNTY SCHOOL DISTRICT	N/A	\$ 93,264,902	237,830,303	(27,138,665)	16,648,453	16,611,957	6,012,261
WEBER FIRE DISTRICT	N/A	72,186	540,069	(304,048)	31,770	66,646	35,792
WEBER HUMAN SERVICES	N/A	2,125,845	12,743,036	(6,670,982)	720,573	1,315,361	402,854
WEBER STATE UNIVERSITY	N/A	216,250	944,894	(345,078)	73,041	87,185	70,205
WELLINGTON CITY	N/A	111,331	405,767	(128,846)	6,728	32,458	6,501
WELLSVILLE CITY CORP	N/A	46,679	278,681	(145,409)	15,822	28,732	8,939
WEST BOUNTIFUL CITY	N/A	420,354	1,739,011	(657,995)	48,214	153,121	39,728
WEST KANE COUNTY SSD #1	N/A	43,703	256,736	(132,173)	14,810	26,347	8,717
WEST POINT CITY	N/A	178,002	1,062,513	(554,313)	60,332	109,543	34,106
WEST VALLEY CITY	N/A	9,482,596	42,036,178	(17,280,556)	3,268,982	4,059,814	1,229,125
WESTERN UINTAH BASIN MAD	N/A	46,612	239,129	(116,779)	—	13,896	—
WHITE CITY WATER IMP DIST	N/A	79,542	484,609	(257,018)	26,967	50,252	14,424
WILLARD CITY CORP	N/A	157,631	687,100	(277,758)	21,581	61,866	14,896
WOODLAND PEAKS UNISERV	N/A	120,529	301,249	(30,694)	20,981	20,713	6,897
WOODS CROSS CITY	N/A	725,943	3,013,044	(1,154,173)	250,971	284,619	80,975
WORKERS' COMPENSATION FUND	N/A	18,651,366	49,408,500	(7,060,226)	3,194,528	3,326,285	1,143,291
	N/A	\$ 2,853,712,331	8,260,942,899	(1,631,575,727)	505,758,422	624,591,349	204,471,717
Units without a proportionate share for 2022 but had a proportionate share in a prior year							
CANYONLANDS CARE CENTER	N/A	\$ —	—	—	—	—	—
GARDEN CITY FIRE DISTRICT	N/A	—	—	—	—	—	—
GRAND CO CEMETERY MTCE DIST	N/A	—	—	—	—	—	—
LIBERTY ACADEMY CHARTER	N/A	—	—	—	—	—	—
MOAB MOSQUITO ABATEMENT DISTRI	N/A	—	—	—	—	—	—
OGDEN WEBER/NEA/UEA UNISERV	N/A	—	—	—	—	—	—
UTAH DAIRY COMMISSION	N/A	—	—	—	—	—	—
VALLEY MENTAL HEALTH	N/A	—	—	—	—	—	—
WEBER RIVER WATER USERS	N/A	—	—	—	—	—	—
GRAND TOTAL	N/A	\$ 2,853,712,331	8,260,942,899	(1,631,575,727)	505,758,422	624,591,349	204,471,717

Utah Retirement Systems

Deferred Outflows of Resources			Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Gross Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Employer Net Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
								Proportionate Share of Nonemployer Contributions	Proportionate Share of Nonemployer Contributions	
1,312,555	40,585,226	100,230	—	6,426	119,515	226,171	30,687,991	849,931	—	31,537,922
14,998	149,206	16,903	—	5,180	26,086	48,169	231,520	2,634	—	234,154
127,224	2,566,012	13,440	—	7,998	18,496	39,934	1,483,329	42,598	—	1,525,927
29,756	260,187	8,580	—	550	10,746	19,876	410,210	3,865	—	414,075
19,555	65,242	292	—	90	1,104	1,486	44,704	18,641	—	63,345
3,882	57,375	318	—	174	11,761	12,253	33,403	(10,942)	—	22,461
27,026	268,089	5,456	—	1,797	13,168	20,421	234,421	(24,341)	—	210,080
2,822	52,696	384	—	161	2,108	2,653	34,359	705	—	35,064
24,682	228,663	1,218	—	666	2,392	4,276	127,518	14,231	—	141,749
176,026	8,733,947	116,296	—	90,010	75,908	282,214	7,040,582	(68,963)	—	6,971,619
—	13,896	—	—	—	—	—	101,079	(2,626)	—	98,453
2,412	94,055	343	—	305	823	1,471	49,736	(2,153)	—	47,583
7,632	105,975	1,064	—	461	1,069	2,594	76,598	11,344	—	87,942
2,536	51,127	—	—	—	4,264	4,264	34,398	3,168	—	37,566
34,459	651,024	4,667	—	6,167	19,880	30,714	475,957	20,416	—	496,373
74,765	7,738,869	17,310	—	1,110	837,962	856,382	6,691,595	(1,418,269)	—	5,273,326
58,489,993	1,393,311,481	8,909,297	—	2,175,250	37,266,588	48,351,135	1,090,929,33	3,418,326	(1,335,491)	1,093,012,169
—	—	—	—	—	227	227	—	(61)	—	(61)
776	776	—	—	—	—	—	—	74	—	74
407	407	—	—	—	1,211	1,211	—	(6,719)	—	(6,719)
3,176	3,176	—	—	—	6,060	6,060	—	(133)	—	(133)
179	179	—	—	—	279	279	—	(9)	—	(9)
121	121	—	—	—	7,888	7,888	—	(29,611)	—	(29,611)
278	278	—	—	—	3,439	3,439	—	(25,473)	—	(25,473)
2,971	2,971	—	—	—	7,268	7,268	—	(663)	—	(663)
—	—	—	—	—	—	—	—	22,851	—	22,851
58,497,901	1,393,319,389	8,909,297	—	2,175,250	37,292,960	48,377,507	1,090,929,33	3,378,583	(1,335,491)	1,092,972,426

Systems and Plans Statistical Highlights

Year Ended December 31, 2022

Defined Benefit Systems

	Noncontributory	Contributory	Public Safety	Firefighters	Judges	Utah Governors and Legislators	Tier 2 Public Employees	Tier 2 Public Safety and Firefighter	Tier 2 Defined Contribution Only	Averages and Totals All Systems
Membership Information										
Total Membership	158,118	4,655	15,737	3,407	293	351	50,735	5,863	13,186	252,345
Active	45,437	253	3,918	1,289	119	44	43,105	5,326	10,679	110,170
Terminated vested	47,415	908	4,673	467	10	70	7,173	530	2,507	63,753
Retired	65,266	3,494	7,146	1,651	164	237	457	7	—	78,422
Total 2022 Active Members	45,437	253	3,918	1,289	119	44	43,105	5,326	10,679	110,170
Average age	51.5	59.7	45.8	46.8	54.7	59.3	38.6	31.8	39.1	44.1
Average years of service	18.6	31.2	18.5	18.9	14.3	15.2	4.1	4.5	4.9	10.9
Average annual salary	\$ 73,277	73,706	85,018	89,157	183,837	N/A	53,881	60,344	61,281	64,601
2022 Retirees										
Number	3,287	66	273	60	4	3	160	—	N/A	3,853
Average age	64.3	65.1	53.5	54.7	64.0	69.3	67.6	—	N/A	63.6
Average years of service	21.7	31.5	22.7	25.2	24.0	9.3	7.4	—	N/A	21.4
Final average annual salary	\$ 60,675	65,173	71,463	89,724	174,079	N/A	49,711	—	N/A	61,594
Average annual benefit	\$ 27,325	43,735	38,754	53,600	138,998	3,984	5,341	—	N/A	28,020
Average annual benefit — all retirees	\$ 25,102	25,970	32,817	41,521	105,684	4,199	4,008	6,054	N/A	26,159
Financial Information										
Changes in Fiduciary Net Position Restricted for Pensions										
	<i>(in thousands)</i>									
Contributions	\$ 985,337	4,915	169,572	48,480	10,713	422	217,343	51,658	N/A	1,488,440
Investment income	\$ (1,833,570)	(70,701)	(267,352)	(94,373)	(14,729)	(693)	(65,084)	(10,791)	N/A	(2,357,293)
Pension benefits	\$ 1,662,640	94,365	241,776	71,019	17,609	1,010	2,602	42	N/A	2,091,063
Net assets at fair value	\$ 32,602,563	1,216,375	4,769,175	1,685,243	262,307	12,122	1,303,331	223,401	N/A	42,074,517
Actuarial Information (GASB 67)										
Employers' Net Pension Liability/(Asset)										
	<i>(dollars in thousands)</i>									
Total pension liability	\$ 34,931,362	1,238,805	5,115,440	1,533,404	297,575	13,166	1,412,220	231,743	N/A	44,773,715
Plan fiduciary net position (fair value)	\$ 32,602,563	1,216,375	4,769,175	1,685,243	262,307	12,122	1,303,331	223,401	N/A	42,074,517
Employers net pension liability/(asset)	\$ 2,328,799	22,430	346,265	(151,839)	35,268	1,044	108,889	8,342	N/A	2,699,198
Percentage of the total pension liability	93.3%	98.2%	93.2%	109.9%	88.1%	92.1%	92.3%	96.4%	N/A	94.0%
Actuarial Information (Funding)										
Funding Progress										
	<i>(dollars in thousands)</i>									
Actuarial value of assets	\$ 33,137,998	1,228,083	4,849,550	1,714,351	266,574	12,255	1,347,780	232,138	N/A	42,788,729
Actuarial accrued liability	\$ 34,931,362	1,238,805	5,115,440	1,533,404	297,575	13,166	1,412,220	231,743	N/A	44,773,715
Unfunded actuarial accrued liability/(asset)	\$ 1,793,364	10,722	265,890	(180,947)	31,001	911	64,440	(395)	N/A	1,984,986
Funded ratios	94.9%	99.1%	94.8%	111.8%	89.6%	93.1%	95.4%	100.2%	N/A	95.6%
Defined Benefit Investment Results										
			1 Year	3 Year	5 Year	10 Year				
Total Fund Returns			(5.04)%	7.99%	7.56%	8.37%				

Systems and Plans Statistical Highlights (Concluded)

Year Ended December 31, 2022

Defined Contribution Plans

	401(k)	457(b)	Roth IRA	Traditional IRA	
Membership Information					
Number of Active Employees Eligible to Participate	113,822	110,348	251,229	251,229	
Employee contributions (excluding employer contributions):					
Number of employees contributing	44,985	9,332	12,768	869	
Percent of eligible employees contributing	39.5%	8.5%	5.1%	0.3%	
Average percent of salary deferred by employees	5.9%	6.9%	N/A	N/A	
Total participants	204,417	20,444	18,877	3,268	
Average participation account balance	\$ 32,063	35,771	15,291	61,518	
Financial Information					
Changes in Fiduciary Net Assets	<i>(in thousands)</i>				Total
Contributions	\$ 418,787	44,496	44,618	24,174	532,075
Net investment income (loss)	(1,116,266)	(128,799)	(48,495)	(28,687)	(1,322,247)
Refunds	398,377	43,383	11,726	16,113	469,599
Plan net position	\$ 6,554,279	731,307	288,654	201,040	7,775,280



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